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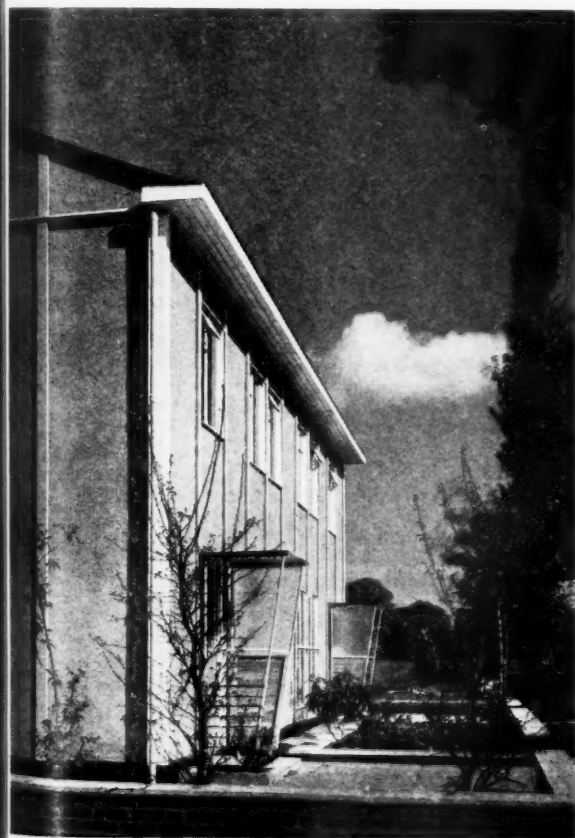
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Journal

THE LATE SIR HERBERT BAKER, R.A. [F.]

We regret to record the death of Sir Herbert Baker. An appreciation of his life and work will be published in the next number of the JOURNAL.



Sample photograph from the "Building Now" Exhibition

R.I.B.A. EXHIBITION 1946

The Rt. Hon. Lewis Silkin, Minister of Town and Country Planning, is to open the Royal Institute's first post-war exhibition on Thursday, 11 April 1946. The exhibition is to be called "BUILDING NOW" and will illustrate the architect's contribution to the immediate post-war building programme of the Government and Local Authorities. There are to be four sections, namely, *Housing, Health and Welfare, Education and Municipal Administration.*

The exhibition is being composed primarily of schemes that are still in the design stage, with the addition of suitable work constructed during the war, such as factory welfare centres and war-time housing, as well as certain work executed immediately before the war which is regarded as making contributions to post-war ideas. It is designed primarily for members of Local Authorities. So far as the showing at the R.I.B.A. is concerned, special invitations to visit it are being issued to the members of all authorities in the Greater London Regional Area, and to members of Parliament.

One of the chief aims is to put across the idea of the neighbourhood unit, in opposition to the too-prevalent idea that all we need at present is housing. The neighbourhood unit and the elements which compose it may be said to constitute the theme of the exhibition, though reference is restricted to those types of building for which Local Authorities or the Government are directly responsible.

The sections are to show examples selected to bring out the various ideas and features which members of Local Authorities should look for in schemes which are presented to their councils and committees. The exhibition will be primarily for interested and informed laymen, though architects will find much of value and interest in it. The Housing Section is to cover both traditional forms and permanent prefabricated houses. A very wide view is taken in the Health and Welfare Section, embracing such extremes as cultural buildings (e.g. libraries) and play-parks, as well as hospitals and clinics. The Education Section includes all types of local authority school from the nursery school to the village college; in this section the policy to be put forward follows the lines laid down recently in the report of the School Design and Construction Committee, published on page 131 of this issue.

The exhibition is being designed to tell a coherent story. It is not a mere collection of photographs, drawings and models. Therefore the Exhibition Committee have selected their material by direct invitation, seeking to find illustrations of points they want to advance and not to show the work of architects as

individuals. They have aimed at a collective effort on behalf of the profession.

After being on show for about five weeks at Portland Place, the exhibition is to tour the country beginning, it is hoped, with the chief centres of population. The Allied Societies concerned have been approached.

An exhibition handbook is being prepared. This differs somewhat from the typical pre-war "catalogue" in being a portable summary of the points put forward in the exhibition. The aim is to provide a book which visitors—and architects—will want to keep as a reference.

LEEDS CITY ARCHITECT

The creation of a City Architect's Department at Leeds is an encouraging piece of news. The Corporation are to be congratulated on a wise reorganisation of their building service on lines which the profession knows will give the best results. It is in sharp contrast to the wrong move recently made by the London County Council.

Until recently the housing work of the Leeds Corporation was under a Housing Director and school building under an architect to the Education Committee, while other departments had separate architectural staffs. The new City Architect is Mr. R. A. H. Livett, O.B.E. [A.], who, as members are well aware, has been Housing Director since 1934. The Deputy City Architect is Mr. P. B. Haswell, B.Arch. (Hons.) Livpl., who has hitherto been architect to the Education Committee.

Mr. Livett was trained at the A.A. and elected Associate in 1922. He was on the staff of the Manchester City Architect from 1930 to 1934 where he designed the first block of municipal flats in the city and worked on Wythenshawe. His housing work at Leeds, in particular the Quarry Hill scheme, enjoys a great reputation. Mr. Haswell was trained at Liverpool University School of Architecture and was the R.I.B.A. Recognised Schools Silver Medallist for 1922.

Announcing the Council's decision, Alderman G. Brett said that henceforth the procedure would be for any corporation department contemplating architectural work to call upon the City Architect's Department to prepare and submit a scheme. If the City Architect's Department was unable to satisfy the requirements of a committee, that committee might apply for authority to employ an outside architect.

COMMONWEALTH FUND FELLOWSHIPS

Copies of the memorandum and form of application for the Commonwealth Fund Fellowships may be obtained, free, on application to the Secretary to the Committee of Award, Commonwealth Fund Fellowships, 35 Portman Square, London, W.1.

The Commonwealth Fund of New York, founded in 1918 and supported by gifts from the late Mrs. Stephen V. Harkness, has established for British subjects a number of Fellowships tenable at certain American Universities. The Fellowships, which are available for architects, are confined to University graduates, but a graduate who is taking a course at a School of Architecture which is not a University School would be eligible to apply for a Fellowship.

There is no fixed stipend, but the emolument attaching to each Fellowship, which is estimated at a minimum of approximately \$3,500 for twelve months, is calculated to cover the full expenses of residence, travel and study in the United States during the year.

A.B.S. HALF-CROWN CHRISTMAS APPEAL

Sir Percy Thomas, as President of the Architects' Benevolent Society, has sent the following message of thanks for publication in the JOURNAL:—

"My Christmas Appeal on behalf of the Architects' Benevolent Society has produced a most encouraging result up to date. The total has passed £1,000 for the first time since the Half-Crown Fund was originated.

"I would like to thank all who have so generously contributed towards the relief of those in distress, and particularly the

anonymous donors, whom we are unable to thank otherwise. Among these, we send special thanks to an ex-prisoner of war, whose losses and privations at the hands of the Japanese have but broadened his sympathy for those who have suffered hardship.

"We are still receiving contributions, and the Fund remains open for donations from those who were too busy to reply before the end of the year."

LECTURES ON OFFICE ORGANISATION

The Council has decided to organise a series of lectures at the R.I.B.A. on the organisation of architects' offices. They are intended chiefly for the benefit of younger members and those starting practice, specially those newly released from the Services. The lecturers will cover large, medium and small private offices, the offices of County and Borough Councils and group organisations. One lecture is to cover architects' accounts. It has been agreed that the lectures will take the form of informal talks with discussions playing a major part. Further particulars will be announced later.

R.I.B.A. PRIZES AND STUDENTSHIPS

The Annual Prizes and Studentships of the R.I.B.A. have now been re-opened for competition. Some of these are open to qualified members, others to students. Full particulars of the arrangements for this year will be found on p. 146 of this number of the JOURNAL.

COLUMBUS MEMORIAL EXHIBITION

The United Nations Organisation has approved a proposal to proceed with the memorial to Christopher Columbus, which was the subject of an international architectural competition won by Mr. J. L. Gleave [A.] in 1931. The model of the memorial is to be on view at the R.I.B.A. from 13 to 23 March. The memorial is sponsored by the 21 states of the American Continents and is to be erected in the Republic of Dominica, whose government has arranged the showing at the R.I.B.A. Mr. Gleave's design was placed first out of 455 submitted. The model is 40 ft. by 18 ft.

R.I.B.A. DIARY

Wed., 6 March, 5.45 p.m. Architectural Science Board Lecture. THE ORGANISATION OF BUILDING SCIENCE RESEARCH.

By Professor J. D. Bernal, F.R.S.

Wed., 13 March. Exhibition of model of COLUMBUS MEMORIAL.

Wed., 3 April, 5.45 p.m. Architectural Science Board Lecture. COLOUR IN ARCHITECTURE.

By Mr. William A. Allen, B.Arch. (Hons.) [A.], Scientific Officer, the Building Research Station.

Tues., 9 April, 6 p.m. Informal General Meeting. Sessional Paper.

POST-WAR HOUSING

By Mr. L. H. Keay, O.B.E., M.Arch. (Livpl.) [V.-P.], City Architect and Director of Housing, Liverpool.

Thurs., 11 April, 3 p.m. Opening of the R.I.B.A. Exhibition. BUILDING NOW.

By the Rt. Hon. Lewis Silkin, Minister of Town and Country Planning.

Wed., 1 May, 5.45 p.m. Architectural Science Board Lecture. THE RELATIONSHIP OF AIR PHOTOGRAPHS TO ARCHITECTURE AND TOWN PLANNING.

By Mr. Frank Scarlett, B.A. [F.]

Tues., 7 May, 6 p.m.

ANNUAL GENERAL MEETING.

Wed., 5 June, 5.45 p.m. Architectural Science Board Lecture. SOCIOLOGY IN ARCHITECTURE.

By a Member of Study Group No. 1 of the Architectural Science Board.

Wed., 25 June, 6 p.m. Informal General Meeting. Sessional Paper.

THE PLACE OF THE ARCHITECT IN THE POST-WAR WORLD. By Gerald Barry [Hon. A.], Editor, *The News Chronicle*.



Air view of a part of Welwyn Garden City

THE PLANNING OF RESIDENTIAL AREAS

GORDON STEPHENSON, M.C.P. Mass. Inst. Tech. (U.S.A.), B.Arch. (Liverpool) [F.]

A PAPER READ TO AN INFORMAL MEETING ON TUESDAY, 15 JANUARY, 1946

THE PRESIDENT IN THE CHAIR.

The housing target has been set. In ten years four million dwellings are to be built. The building industry is to be expanded beyond its pre-war size. Between 1919 and 1939 nearly four million new houses were erected; we are to double this pace. We are agreed that this is possible. We architects have a most important role to play. The main task of translating programmes into designs and buildings should be ours. We are trained to do this job—particularly the men who were educated, between the wars, in schools of architecture.

But the design of individual houses and pieces of layout is not enough if we are to solve the many complicated living problems posed by the present physical arrangement of the vast majority of towns.

About three-quarters of our urban land is in residential areas. In ten years we are to build one-third as many dwellings as now exist. Here is a great opportunity to start the comprehensive remodelling of the larger part of every town. I believe we can do it.

Before the war English housing received world-wide praise. The late Sir Raymond Unwin, a former president of this Institute,

was, I think, generally accepted as the leading international figure in housing. His theoretical studies and his pioneer work had tremendous influence. His approach was essentially humanistic, and quality in design was a fundamental of this approach.

Even before the last war he and other pioneers were gaining ground in many directions. The Housing and Town Planning Act of 1909 accepted many of their principles. From there on new development was at a reasonable density and new principles of layout were to be applied. Many excellent fragments of development have resulted from this and subsequent Acts. They are well worth close examination.

But, except for these fragments, mostly built by local authorities and housing associations, and the work undertaken at Letchworth and Welwyn Garden City, history will, I believe, record our main achievement on two counts: first, the quantity of houses we produced in two decades; and, second, the relatively high space standards in the individual houses. On these two counts we did as well as any country in the world.

With the great mass of housing extending the towns, the

physical layout and form and the important relationship between housing and workplaces, shops and general community facilities left a lot to be desired. These very considerable extensions are aptly described as "urban sprawl."

I hope, to-night, briefly to review the immediate past; examine various theories of planning residential areas; show some details; and, then, on the basis of a particular example, suggest a planning method and submit it to discussion.

During the war we have not neglected to make some preparation for post-war building and reconstruction. I have met several allied technicians—architects, engineers, planning officers—and administrators. They are very impressed with what we have been able to do under difficult conditions. New legislation has been enacted and a fundamental Bill, recently announced by the Minister of Town and Country Planning, is now being prepared. This should lay the greatest planning bogey. The fear of having to pay excessive compensation without ever being able to collect betterment has stayed the hand of every planning authority. Remove this fear and land can be correctly planned and developed in an orderly fashion. Land will be acquired either by or for local authorities and other developers on the basis of a global assessment rather than the speculative cost.

There is also the "Blitz and Blight" Act of 1944 which enables local authorities, for the first time, to deal with re-development in a comprehensive way: and, again, the process of compulsorily acquiring land for housing and other purposes is being accelerated.

I will try to show the important effect these new powers may have by illustrating the plan for the development and extension of Amsterdam. This was being carried out in an orderly and sensible way for two reasons: first, the historic accident, that no one can build there until the land has been prepared for building (and, of course, in these days of large-scale building only the city can properly prepare the land, and that means it becomes the landowner); second, the planning function of the local government has been fully recognised and this is apparent in the organisation.

To-night, I don't propose to talk about the design of individual houses or flats—or even the detailed grouping—except by occasional reference. To my mind the classic Tudor Walters Report, the Dudley Report, and the many scientific studies which have been made in recent years by the Building Research Station give us ample food for thought—and the food is by no means of austerity standard.

If the fact that competent architects should be employed to design all housing schemes becomes universally recognised we can confidently look forward to a period of good house-building, good design and good layout. It is one of our jobs also to help to ensure that we also have good planning in the general sense—for planning we are going to get. We cannot avoid it now! The Act of 1943 puts all the land in the country under planning control. There is room for many of the younger architects to enter the planning field. There is need for further improvements in planning education.

The following was a commentary by Mr. Stephenson on the slides:
England is more highly urbanised than any other country in the world. Over 80 per cent. of the population lives in towns. The majority live in what are virtually extensive patches of continuous urban development. The piecemeal building of millions of new houses would spread these patches in further disorder.

Greater London provides the most dramatic example of urban growth. In 1840 Hyde Park was on the edge of London—one hundred years ago—but the industrial revolution was booming. The age of reason, science, *laissez-faire* and Malthus was about to begin. By 1860 the built-up area was a modest 15 square miles in extent.

By 1880 the railways were effecting changes in the character of the growth, but the spread was still relatively modest. By the turn of the century the built-up area virtually coincided with the County of London. But outliers were beginning to grow. People were beginning to travel to work—the hard way. The commuter was launched on his career.

By 1914 the pace was getting giddy. The low-density sprawl was moving out and along the railway lines. Ten years before the war the pace was terrific. People were moving from the congested areas to the edge. Immigrants were entering from the provinces. Rail and road transport was hitting the high spots.

But the highest rate of growth was immediately before the war. The disorderly sprawl knew no boundaries. In forty years the built-up area had quadrupled in size. The Barlow Commission reported in 1940. In the middle of the war Professor Abercrombie was appointed to prepare a plan for Greater London—an area of 2,000 square miles.

London is only an exaggerated example of what was happening in all the industrial towns and ports. First came the mean alleys; then the mass-produced bye-law streets. The urban scene; macadam, bricks and mortar and smoke. The only virtue compactness, but at excessively high densities.

Then came the various universal plans to suit the fashionable large families, people of all classes, and the boarding house landladies. Street after street, mile after mile. You had to conform to the pattern whether you were single, married or old-aged. Victorian houses were built to last. There are four million houses which have been standing for eighty years or more.

The universal house was modified and entered the universal suburb. The barrack-room precision of the Victorian builders gave way to the "willy-nilly" school and the paper-pattern makers. The roads out of every town were lined by the new universal house. Farm units, market gardens, woodlands, were devastated. The car which made this kind of development possible found and created new hazards on every road.

Local authorities built many well-detailed housing estates wherever they could buy relatively convenient land cheaply on the open market. Families moved from congested areas to the new estates. In general, many of the young and vigorous took the new houses, leaving the less vigorous and older population in the older areas. There seemed to be no means of striking a balance in types of accommodation. You had to live either in a tenement estate or a cottage estate. The one on expensive land, theoretically near to workplaces. The other on cheaper land down the line or bus route. The dehumanisation of many of the inner areas began. The barracks took the place of the lower density, pleasant but obsolete houses with gardens. Yet we had once excelled in urban building at relatively high densities. And there are certainly examples of the imaginative handling of large blocks of dwellings. Boldness in design, space and setting are essential in flat building.

In the eighteenth and early nineteenth century England was building some fine urban residential architecture. At the turn of the century, Ebenezer Howard, who had dreamed as a shorthand writer in a Chicago court, returned to his own country and developed his revolutionary "Garden City" theory. He, the intelligent layman and social reformer, foresaw the need for a radical solution to growing urban congestion and sprawl. He conceived the bold idea of starting afresh with new industrial towns of limited size. His famous diagrams incorporated many of the generally accepted planning principles of to-day: residential areas in balanced units, closely related to workplaces, civic and social amenities and the countryside.

The satellite town is now a partial solution of the problems of decongestion and decentralisation. The new industrial town may be a part solution of some of the problems of the derelict industrial areas. The principle of building workplaces with housing is fundamental. Several nineteenth-century industrialists and reformers had foreseen this. Port Sunlight, built before the first world war, is probably the best-known example of the town planning zeal of a small band of industrialists. But Welwyn Garden City is by far the best example of the radical solution. Here a new town is growing with a diversified industrial structure: a new town with a new and more civilised life for its inhabitants. It has been severely criticised by some zealous theorists, but it is as well able to stand the test of time as Picasso, who has recently received some comment in the Press.

Nobody has yet achieved a radical solution of the recon-

GREATER LONDON PLAN 1944

ONGAR II



A NEW SATELLITE TOWN OF 60,000 POPULATION

- EXISTING BUILDINGS
- HOUSES, GARDENS & FLATS
- SCHOOLS
- SHOPS & COMMERCIAL BUILDINGS
- PUBLIC BUILDINGS
- INDUSTRY
- PUBLIC OPEN SPACE AND SCHOOL PLAYING FIELDS
- CAR PARKS AND GARAGES
- RAILWAYS AND STATIONS
- CONTOURS AT 20' INTERVALS

POPULATION REACHES NEIGHBOURHOODS:

NO. 1	10,000	NO. 4	17,500
NO. 2	11,500	NO. 5	8,000
NO. 3	14,000	NO. 6	8,000
TOTAL 60,000			

NET RESIDENTIAL DENSITY 30 PER ACRE. THE PLANNING OF THIS COMMUNITY FOLLOWS THE STANDARDS SUGGESTED IN CHAPTER II. EXCEPT FOR AN EXTRA 500 ACRES OF OPEN SPACE IN THE RIVER VALLEY WHICH BRINGS THE TOTAL OF APPROX. 15 ACRES PER THOUSAND PEOPLE.



Plan of the new satellite town of Chipping Ongar, Essex. From the Greater London Regional Plan

struction of obsolete town layout and building. The brilliant technical solutions of the artist, poet, reformer, humanist and architect Le Corbusier have shown a method. He gives us the extreme in his "Ville Radieuse." He clashes fundamentally with the sociologist-philosopher Mumford.

The main problem is to plan towns, and particularly residential areas, in a humane and civilised way; to reduce the burdens and lessen the dangers of modern urban life; to facilitate social intercourse and the democratic way of doing things; to introduce a quality and beauty into everyday environment; to reduce that ever-growing journey to work.

The well-placed industrial estate is one of the keys to industrial reconstruction and efficiency. Team Valley, Treforest and Slough are examples. The latter, of course, is on first-quality agricultural land and induced the seemingly inevitable urban sprawl. The two former were unaccompanied by a housing programme.

They should be carefully placed within a general development plan with residential areas which satisfy basic human needs; incorporating all those buildings and recreational facilities that modern civilisation demands. New shopping and civic centres are needed, arranged in an orderly and efficient manner; and many new schools to satisfy the regulations of the fine Education Act of 1944. The space standards will, if enforced, literally let daylight into the towns and the lives of children. About four acres per

1,000 population (as much as the total proposed in the County of London Plan) is required for educational purposes alone.

Ingenuity, variety and simplicity should be exercised in the design and arrangement of groups of dwellings. They should be knit together in rational patterns dictated by convenience, amenity and freedom from danger. Variety should embrace the many types of dwellings required by the various population groups. For example, the aged persons group is growing in relation to the whole population; and, in many housing schemes, the existence of single-person households has never been recognised.

Flats can be built in many forms for several population and income groups. Flat building should not be synonymous with high-density building. It was Le Corbusier who first underlined the importance of the recreational open space "au pied de la maison."

Recreational open space is a fundamental human need. The family cannot survive with bricks and mortar alone. The traditional English playing fields have had an important part in the development of our civilisation. The "dogs" and the "pin-ball" tables will not suffice. Social, Community or Art Centres are needed in all residential neighbourhoods worthy of the name. During the war many fine examples have been built in the small temporary communities for Ordnance Factory workers. Allotments, successfully incorporated in Römerstadt,

one of the many fine Frankfurt housing schemes, are required in every town.

Landscape architecture, a field where once we excelled and influenced the world, must come into its own again. The education of landscape architects must be further developed. In many American schemes the employment of a landscape architect is taken for granted. A planting plan and the modelling of the ground itself make an enormous difference. There are new fields to conquer in layout technique. If in doubt, look once more at some of the ingenious and rational solutions developed by some of the Victorians. Ladbroke Grove Gardens were the precursor of Radburn.

At Radburn, in New Jersey, is to be found the first experiment in design for the motor age. It is an incomplete fragment of the design prepared by Clarence Stein. Dr. Thomas Adams and Sir Raymond Unwin were among his associates. It was followed by the Greenbelt Towns; demonstration towns (or satellite suburbs) designed and built by President Roosevelt's first government. America has also given us some very interesting wartime housing schemes. We should look at them closely, and particularly at the arrangements made for the ubiquitous car.

And last, but not least, let us consider density. How can we solve the problem of urban congestion if we congest again? And how can we avoid re-congestion without a radical solution of the urban land problem? I take as an extreme example Stuyvesant Town. This is a post-war scheme for East side Manhattan; a half-way solution which promises to be no solution at all. The prosaic geometrical pattern of thirteen-storey buildings will crowd together nearly 30,000 people on 72 acres of land. The density, on a normal calculation, will approach 600 people to the acre. There is no school on the site, and the open space amounts to .29 acres per 1,000 people. All this despite the fact that the City of New York subsidises this private enterprise scheme to the tune of £5,000,000 in 25 years. Fortunately, it is unlikely that we shall ever contemplate half this density.

Urban re-development can never be satisfactory if the approach is piecemeal. The problems have to be seen as a whole. Since the days of Patrick Geddes we have realised this fact; but, for almost the first time, we are making comprehensive regional surveys and town plans. During the war the whole of Greater London has been surveyed and planned in broad outline, though the heart—the City—is under revision. Three distinguished members of this Institute are responsible for preparation of these plans. The County of London Plan has been accepted, in principle, by the responsible Planning Authority, and before long we shall see the beginnings of a saner reconstruction policy. Standards have been set—we may quibble a bit about the open-space standards and residential density—but we accept the work as a magnificent contribution. The humanistic approach prevailed.

The community planning principles established promise a new urban order. The new will rise from the old, though the whole structure will be very much more efficient. Living conditions will be enormously improved. The boroughs, or communities, within the larger community will be redefined. Social and recreational amenities will form part of an all-embracing pattern.

The old pattern is chaotic. There is little rhyme or reason in the street layout. The major thoroughfares are a series of bottlenecks. Industry and housing are jumbled together. Sorting out and the introduction of order would be achieved by period planning. The residential areas would be relatively spacious and certainly more liveable and convenient. Industries would be regrouped: some outside the county, with the decentralised population. The main road and open-space system would knit the communities into a coherent pattern.

The whole regional plan, begun by Professor Abercrombie and Mr. Forshaw in the County of London, was completed by the Greater London Plan. It is complementary to the County Plan. In it Sir Patrick Abercrombie proposes room and transport routes for the new population and industrial groupings; security for agriculture and the many lovely stretches of open

country. The Greater London Plan shows proposals for the reconstruction of bomb-damaged and obsolete areas in the Inner Urban Ring. Particular cases were examined. Density and open space standards were established. The densities range from 100 persons to the acre to the predominant 30-50 persons to the acre. The open space standard generally advocated is ten acres per 1,000 population. Some of the boroughs have reached an advanced stage in their first programmes for the reconstruction of the bomb-damaged residential areas. In West Ham, Mr. North, the architect and planning officer, has prepared a period plan which will be developed under the 1944 Act.

The most exciting proposals—for architects and the majority of laymen—are those for a series of eight satellite industrial towns. They are to receive population and industry from the congested areas; to offer an alternative to suburban sprawl. The practical dreams of Ebenezer Howard approach large-scale realisation.

Principles were laid down for the rounding-off and balancing of the many suburban and scattered dormitory fragments. Now the Greater London Plan is being studied by government, local government and other bodies. Agreements, in principle, are being reached. Gradually, it will take final and definite shape. The new Planning Bill will make a firm plan possible.

In order to illustrate an example where all the residential areas of a town are being planned in a meticulous fashion I have a series of pictures of Amsterdam. It is a town which has been planned throughout practically the whole of its life (the worst slum area is the one unplanned bit of any size). Planning was a necessity because of its site. Amsterdam, the size of Liverpool, is one of the most beautiful cities in the world.

In 1928 a new planning department was created in the City government. Seven years later the well-known development plan for the city was essentially complete, together with some detail plans for immediate extensions. The plan comprises: a new port and major industrial area in the North-west, several extensive residential areas; a two-thousand-acre park in the South-west—which has been made; a series of major road improvements; a new central market—also completed; and a new railway line connecting the residential areas to the major and minor industrial areas—half completed. These are the most important features. Rebuilding in the old city is carefully controlled by an aesthetics commission. The whole structure of the plan is logical and orderly.

The residential area plans are prepared in great detail after an extensive fact-finding survey has been made, together with many design studies, which determine principles and details of the layout, including the financial and sociological. No new residential building is allowed in the city except in those areas for which detailed plans have been prepared. All the social and recreational, commercial and civic facilities are planned in co-operation with the appropriate bodies. The proportions of various types of housing required are calculated on a city-wide cross-section. The heights and widths of buildings, widths of streets and footpaths, the position of services and the landscaping are carefully worked out. No departure from the three-dimensional layout is allowed except by permission of the planning authority, which in turn has to get the approval of the central Government.

Housing associations and co-operatives have the largest share in development. Flats form the majority of the dwellings. This is determined to a large extent by economics. On all land for housing sand has to be pumped to a depth of about 15 feet. This eventually consolidates to about 8 feet. Apart from the expense of the preparation of sites, pile foundations are costly, but they are needed under every building.

A feature of the new residential areas is the use made of new canals, which are included as an amenity. Schools are very carefully spaced throughout the residential neighbourhoods. The primary schools are within easy access of all dwellings, and their catchment areas are not cut by important traffic roads. Shops are generally grouped on the tram routes leading in to the



In Greenbelt, Maryland, wide walks provide safety for children. Note the overhead road in the background for motor traffic

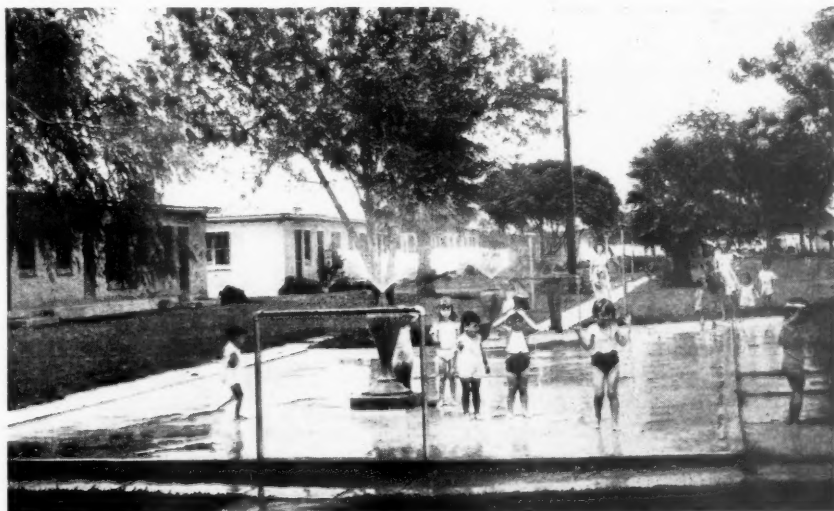
centre of the city, though there are cases where the corner shop fits the requirements. All blocks of dwellings are in fact designed by architects. This is not a legal requirement, but developers know that their designs are unlikely to be approved by the planning authority if they are not prepared by an architect.

Slotermeer is the latest residential area to be planned in detail. Apart from the considerable range of the more normal recreational facilities, it includes a large lake for boating and yachting. The port industrial area is immediately to the north, beyond the green park strip. The park system clearly defines the residential neighbourhoods which are traversed by the tramways to the city. The new ring railway is immediately to the east, on the edge of the plan.

The three-dimensional plan is covered by a zoning map and a building code. For study purposes, models are made of all residential areas, and the final plan is in fact reproduced as a

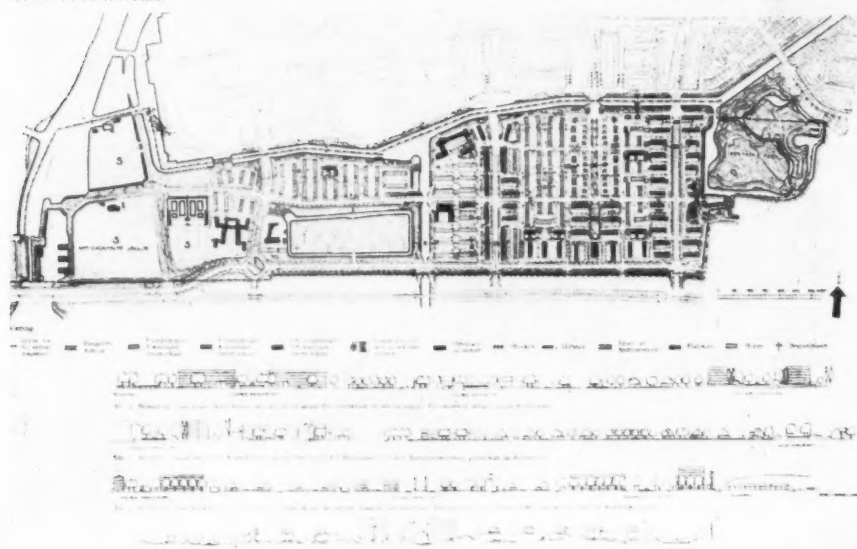
model for general exhibition, and popular drawings, perspectives and so on, are also made. Again, modifications are studied by these means. The really high buildings are placed on the edge of the major open space and would, I think, pass the day-lighting tests of the Building Research Station.

So much for Amsterdam. We might draw these conclusions. First, standards should be set for all residential areas. They would include housing density, open space and space for social and recreational buildings. Secondly, every town should be surveyed to enable the right conclusions to be drawn about the residential, commercial, industrial, open space and road patterns, and then a general development plan should establish an overall pattern. This would be an extension and remodelling plan within which future development should take place. Only within such a framework can sensible and orderly detail plans for residential areas be drawn.



Street scene in Buena Vista, a war housing project at Brownsville, Texas. Children enjoy sprinklers on a concrete square, surrounded by grass

1. KRISTAL - VERHOUDINGEN EN TOEGANG VAN DE SCHIJNWERKT EN DE AMSTERDAMSKANAAL TUSSEN DEN SCHIJNWERKT EN DE BOEZEMWATERING AN - TOEGANG (AMSTERDAM)



Plan and street sections of Amstelkanaal, a suburb of Amsterdam. The sections illustrate the careful study of planning in the third dimension

Finally, a word about organisation with its many difficult problems. In order to carry through the planning projects and developments of the next decade, organisation must be properly established within the framework of local government. Close collaboration between elected committees, administrators and the technical specialists is of first importance. A reasonable balance between the various views has to be struck.

I don't think I can do better than finish by outlining briefly the Amsterdam organisation. The Amsterdam Plan would be another large volume for the bookshelves if it were not backed by a working party established to see it carried through. Within the city government all planning and development departments are grouped together under a Director of Public Works. He is responsible to a committee of the city council, the chairman of which is an Aide to the Burgomaster.

The important executive unit comprises the Director of Public Works, the Director of Planning, the City Architect and the City Engineer. An assistant to the Director, responsible for administration and finance, acts as secretary. When necessary the City Estates Manager and the City Landscape Architect join in the committee work.

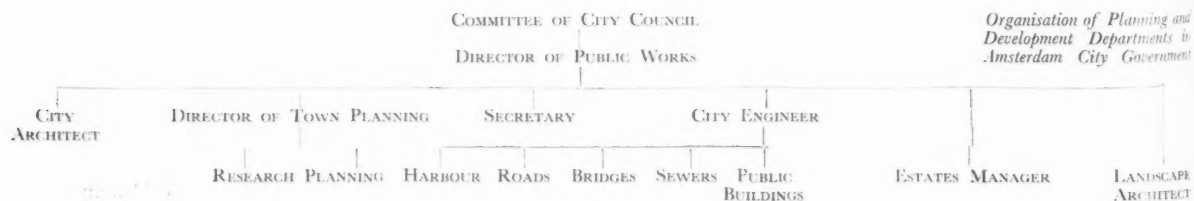
The present Director of Public Works, a man of unusual ability and without professional prejudice, seems to have a remarkable working team. This has been formed since 1928. I feel sure that half the battle was won by the full recognition of

the planning function in the local government and the fact that planning is not a one-man job.

I will go into one detail only of the organisation. The Planning Department is divided into two main sections: Research and Planning. The Research section specialises in social-economic and technical-economic studies. They help establish the planning programmes. They make the preliminary sociological, population and financial surveys. The Planning section, on the other hand, draws up the physical plans on the basis of the established programmes. Mr. van Eesteren, the architect in charge of this programme, is well known internationally and the President of the International Congress of Modern Architects. The Secretary to the Planning Director is responsible for writing the codes or clauses which cover the detailed planning schemes.

Detailed plans, which become legal documents binding the local government as well as property-owners and other developers, have to be prepared many years ahead of requirements. This is a weakness. Expropriation takes seven or eight years to complete. After a proposal to expropriate has been approved by the Central Government it goes to the courts for arbitration. Here, purchase prices are decided.

I think we shall be able to beat this. I hope we shall be able to compete in technical and administrative organisation. Then we shall really be able to plan residential areas in a way which should satisfy the most exacting.





New housing blocks in Amsterdam, placed at right angles to the main road

Vote of Thanks and Discussion

Extracts from the Speeches

PROFESSOR SIR CHARLES REILLY, O.B.E. [F.], who moved a vote of thanks to Mr. Stephenson, said: It is always a great pleasure to me to propose a vote of thanks here, but it is a particular pleasure when that vote of thanks is to an old student who has read an excellent paper, following right through the modern developments of housing. Mr. Stephenson was an architectural student under me, and later became a town planning student—or, as we like to say in Liverpool, in our more civilised way, a student of civic design—under Professor Abercrombie. Then he went on a tour round the world, going to Paris and studying there under Corbusier, and visiting Russia and Greece, and eventually winning a Commonwealth Fellowship and going to America, so collecting all this world information which he has condensed for us to-night. I think that that is a grand career for any man, and I am very pleased that he has eventually landed in the Ministry of Town and Country Planning, where he has as a colleague another Liverpool man, Professor Holford, who is to second this vote of thanks.

I do not feel competent to follow Mr. Stephenson right through his survey, but there are two or three things that I should like to say. The other day Mr. Van Eesteren, the Amsterdam town-planner, came to see me in Brighton. As we were meeting as friends, I ventured to suggest to him that these blocks of equally-spaced buildings all of the same height and shape, giving the maximum sunlight no doubt into every room, might nevertheless be dull, and that the whole conception might seem mechanical, a piece of engineering rather than a piece of architecture.

I remember what a pleasure it was in Cambridge to live in a shape and to see shapes around me, and I feel that we may give up too much in an effort to obtain the theoretical maximum of sunlight, which in any case our climate does not provide for us, whatever we do. There is something to be said for a plan in which all the rooms do not have exactly the same aspect and in which all the blocks do not look exactly alike.

There is another thing we are in danger of forgetting in modern planning. As human beings we have our private side, and want our homes to ourselves, but we also have a communal side. That communal side has been emphasised all through our history, in our houses round the village green and in our squares, where at any rate all those who had a key to the square had the opportunity of getting to know one another. In these great blocks of flats, unless there is a communal room, is there much chance of that? The other day at the Polish School of Architecture I noticed that in designing a block of tenements they included a communal room with a stage at one end; they told me that they never built a block of flats, for any class of the population, that did not contain such a room. There they seem to be well in advance of us.

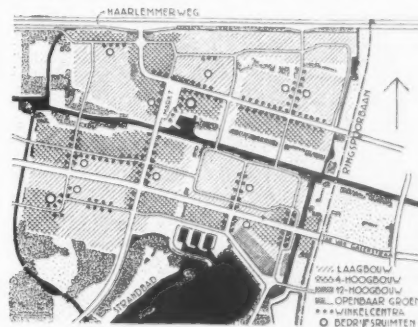
Where there is a square, through the children you get to know the other people who live there. Mr. Stephenson showed us the plan of the

Ladbroke Grove area. I know that well, because my daughter lives there. The children there can pass out of the private garden into the public garden direct, without crossing a road, and they soon make friends, and so the people round that garden soon get to know one another.

We have the very valuable characteristic in the top and bottom parts of English society that we are very friendly. In the little slum streets, people help each other: if the mother is ill, the children are taken care of by a neighbour. Then we move them away to an L.C.C. estate, where they know no one, and they long to get back to their friendly slums. How are we to maintain this fundamental friendliness of our working classes and this fundamental friendliness of our upper classes, as against the fundamental snobbishness of the middle classes, who may live in the same road for half a dozen years and not know half a dozen people? The silly notion of "keeping oneself to oneself" is against all that is best in the character of English people.

We want to make sure that people who belong to one political party mix with those who belong to another, and that people who read one kind of newspaper meet those who read another. The mixing of the population is the only way to make a democracy, but I am not sure that some of our modern plans do not tend towards making individualists and isolationists rather than good citizens.

PROFESSOR W. G. HOLFORD [A.]: It is both a pleasure and an embarrassment to second this vote of thanks. I think that there is a quiet revolution going on, in which Gordon Stephenson and many others are taking part, which is something like the revolution which took place after the last war, but it centres this time a little more on the land and on the grouping of houses than on the house itself. There



Zoning map of Slotemeer, Amsterdam

Afb. 6. Systeem van winkelstraten en bedrijfscentra



The canal system of Amsterdam is extended into the new residential areas

are two very important things that we have to do in this next building period, whenever it starts—and I hope that it is going to start soon.

The first is simply to raise the lowest common denominator. That is something which brings the planner into the housing field. We have in fact to have a certain dead-line of standards below which we will not allow any family in this country to sink. That is the natural result of all our social legislation over the last hundred and fifty years—that we should have certain standards, certain modules, certain measurements, which we can apply to any development of any kind and say, if necessary, "This does not measure up to the minimum that we consider reasonable and decent." On the other hand, we have all the experimental work, all the attempts at building not only rightly but brilliantly; not only providing the minimum of open space and a bus-stop, but having a layout which makes one feel that here is something worth looking at.

That experimental side is, I think, the architect's particular contribution. The planner will have to watch that side of it all the time and learn from what the architects are doing in the way of experimental layouts and good examples. It is only by providing sometimes things which may have been rather extravagant, and even luxurious, that you can make progress by eventually making something which has been tried out as a luxury generally available in the next generation.

In residential planning there has been a good deal of talk about units and sizes, and I want to say a word about that in view of the many criticisms which are bound to be levelled against any particular theory which happens to be before the public eye. The idea of the standard is, of course, aimed at the first of my two elements and not at the second. You must have a measuring rod, or you cannot see that the lowest common denominator is raised, that standards are made applicable in the middle of a rebuilt town as much as in the suburbs on the outskirts. The design side of it can come only if people who are trained in design and who think about these things will work out particular patterns for particular places which other people, and particularly councillors, will see, and which will make them ask why they cannot have something like that.

As for Sir Charles Reilly and his shapes, I agree entirely that the graciousness of living in residential areas can be provided only when you have a certain overplus not only of money and of designing ability but also of land. To my mind, the answer to his request, and the reason why some of the examples from Holland and Sweden and Denmark do not measure up to our ideas of what is interesting, is this question of land. In Stockholm you have not only a very minimum house or flat but also far too high a density, and that in a land where open space is extremely common. In Amsterdam, for physical and financial reasons, the planners are building to a high density.

If we can get the land question settled, then with our tradition of an open, spacious, garden city type of planning we shall have the opportunity to do more. If any architect is faced with a small square of land on which he has to put so many houses, he is bound to think first of the lowest common denominator and to say that all the houses and flats must have good daylight, and that must often lead him to a rigid plan; but throw in another few acres, making the density a little lower, and immediately you give him the opportunity of doing some-

thing which is more interesting and perhaps of bringing in the shapes that Sir Charles Reilly so rightly demands.

Both those points underlie what Gordon Stephenson had to say to-night. Perhaps anyone who was a little sleepy may have thought that he was saying things that were very simple indeed, but I am sure that they were fundamentally absolutely sound. What we have to aim at in housing is first of all to improve our standards and then bring in the designer, the man who can in fact produce a housing estate and turn it into a work of architecture.

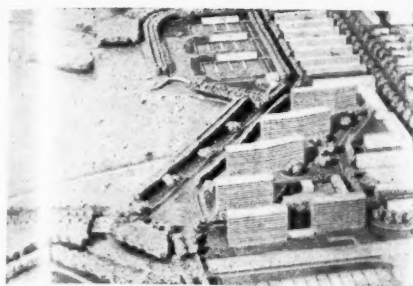
MR. EWART G. CULPIN [F.]: This lecture takes me back a long way. It is over forty years since I joined that trinity of Ebenezer Howard, Raymond Unwin and Thomas Adams in their work at Leitchworth. I went over a great part of the civilised world giving lectures of this sort, but not up to this standard, because we had not learned many of the things then that we have been shown to-night. It is a good thing that these matters should be recalled to us.

I have had the good fortune of having to design completely some half a dozen entire garden villages, and I am glad to say that I have not offended our lecturer by not providing such necessary things as communal halls, playgrounds and open spaces. The difficulties arise, as Sir Charles Reilly has said, over the question of land and the question of finance. It is not always that you can find the firms or groups of people who are willing to put up the money for such a scheme. In my own cases they were mainly collieries, and sometimes philanthropists like the Levers and the Cadburys.

We are concerned primarily this evening with residential areas, and with the reconstruction necessary to deal with the bombed areas. We have to consider who is going to own the land and who is going to carry out the work, and whether the municipalities will be strong enough to carry out the ideal or will be influenced merely by the fact that if they crowd in a large number of houses to the acre there will be a better financial result. In London, I think they are asking us to put 41 houses to the acre on certain sites. How can we carry out the principles of this lecture if that sort of thing is going to be done? Yet I know that that figure has been given in some districts to the architects who are doing the reconstruction.

I hope that this lecture will have its influence on those who are taking up this important work of reconstruction and replanning, because it goes right to the heart of our social structure. If we can make this country a happier place to live in, and allow our children and grandchildren to live in circumstances of comfort, ease and recreation, it will be an excellent thing for the country, and it will make it possible to reconcile many at present irreconcilable ideals. We owe great thanks to Mr. Gordon Stephenson for having shown us the way out of many of our troubles.

MISS J. G. LEDEBOER [A.]: I should like to see the whole of the slides over again, with further explanations. We saw a very great deal of which we should like to see more. In particular, I think that it would be worth while knowing more about the Amsterdam plan and knowing why certain things were done and where mistakes were made and alterations suggested. This is surely a theme for a further informal meeting. We were slightly disappointed, as Sir Charles Reilly said, that so much planning should lead to rows of houses in



Corner of the model of Sloterveer, Amsterdam, showing oriented housing blocks and (left) the lake.

regular patterns. He suggested that we ought to have more shapes. The only thought that I can contribute to this discussion is that when you are planning, frequently it is the land itself that indicates what should be done. You are not necessarily led to shapes such as Le Corbusier has suggested with long avenues of tall flats, nor to the village green which Sir Charles Reilly would like to see, nor, as in Amsterdam, to regular rows of houses.

The fact is that human nature and the land itself require very considerable variety. The human scale, particularly in residential areas, is different from the motoring scale. Our trouble in the design of residential areas is to bring about a proper relationship of traffic to the human being that walks on two feet. We should deliberately turn our backs on an overriding pattern in residential areas and seek our inspiration from the land itself, the relationship of the human being to the trees, and bring to bear the absurdities of human nature to relieve the theoretical pattern that we so frequently see suggested.

MAJOR E. CARTER (National Council of Social Service): I have a very small bone to pick with Mr. Stephenson. I do not wish to criticise his admirable paper, but I do want to criticise his use of a word which is continually coming up in planning discussions—the word "satellite." He referred to a "satellite suburb" in America, and he mentioned "satellite towns" in connection with the London plan. I do not pretend to be a planner; I speak from the social or sociological angle; but I suggest that the term "satellite suburb" is self-contradictory. It is, however, a contradiction which a great many people do not realise, and therefore they think that if they build a new suburb—something which is really a suburb, which is under the town to which it is attached—they have a satellite. I suggest that from the sociological angle that is a very dangerous fallacy.

I have been out of touch with this work for three years, but a little more than three years ago I asked a high official in the Ministry whether there was any reasonable standard definition of a satellite town. His answer was "Regrettably, no." There is a great deal of

confusion of thought about it, and I suggest that we ought to get people to realise that to speak of a satellite town implies a considerable measure of self-containment. For some purposes the satellite town must be dependent on a larger town at some distance from it—you cannot have all the things that the community want in every town—but if we could have a reasonable measure of agreement on the ways in which such a town should be self-contained we could plan a satellite town which really was a satellite town and not a dormitory or a suburb.

Sir Charles Reilly mentioned the inclusion in a block of flats of a hall with a dance floor, and that is admirable. I have been working on community centres for some fifteen years, and we have always said that that is necessary as a start, but only as a start. If anyone produced a design for a community centre which was adequate to-day for the needs of the community which it had to serve, that centre would not be adequate twenty years hence, and might not be adequate even ten years hence. We should look ahead socially in our planning, and provide the space for the community facilities which will be needed fifteen, twenty and even thirty years hence, rather than provide merely what is adequate to-day.

MR. G. L. REED (Housing Attaché, U.S. Embassy): I have enjoyed this talk tremendously, and am very impressed by the fact that the research section of the Ministry of Town and Country Planning is led by somebody who is so competent and outstanding in this field. It gives us some hope that perhaps the new standards about which you are talking will not produce the same type of dwellings in our new programme that I believe standards did produce fairly generally before.

Even the perfectly sunlit room, if it is repeated in multiple storeys and blocks, even though it may provide those physical surroundings that make for acceptable living standards, becomes dull. I would venture anywhere, except in Welwyn or Letchworth, to say that to me the perfect garden suburb, if repeated *ad nauseam*, would produce somewhat the same distressing effect. We have to find ways of bringing about variety in order to serve a variety of individuals and bring out the beauty that seems to be so definitely a part of the better life that you want here in England.

Each time in the past when we have tried to improve our towns by what you call bye-laws and we call building codes, the technical follow-up seems to have been to build to the limit of that standard and only to that. Our worst slums in New York were built in accordance with a building code; the "dumb-bell" tenement was designed to make the maximum use of the space permitted by a code. But with a research section as effective as it seems to be in your Ministry of Town and Country Planning, fully cognisant of the fact that the standard alone can be dulling, it may be that we can look forward to planning standards that will not depress rather than enhance the type of life that we want to get out of a better planned community.

MR. RONALD COLLIER (Chartered Surveyor): I should like to lay one boggy which haunts this problem. It is often said that it would be impossible costly to bring all the land under public ownership. I have made certain calculations which show that to buy all the buildings and land in the British Isles would cost as much as it cost to fight the last war. That, however, is not the true picture, because to bring the land into public ownership would cost exactly nothing. The idea would be to secure all unbuild-on land which, of course, would be income-producing, and therefore pay for itself, and to acquire in reversion all built-on land. You would estimate the life of the existing buildings and would allow the owners to continue to occupy as if freeholders at a peppercorn ground rent, and the land would fall in reversion at the end of the life of the building. For that, the modest sum of about half a year's purchase is all that the tables show that it would cost, so that it is not a financial problem to bring about this essential reform, which is to my mind the only way in which you can change the face of England within a foreseeable time.

MR. S. L. G. BEAUFOY [F.]: As you know from the Greater London plan, it is proposed that there shall be a green belt round London approximately five miles in width, and I should like to draw attention to the importance of the preservation of this green belt if we are to have a proper plan for London and see residential neighbourhoods developed in a proper manner. I hope that architects and others, whenever the opportunity comes to them, will do what they can to insist that that green belt is preserved, because that is where the pressure is coming all the time. It is coming from great municipalities who ought to know better, but who want to develop large housing sites in it, and it is coming from private enterprise development and from the smaller local authorities in the area, who see themselves growing and becoming county boroughs.

MR. GORDON STEPHENSON (in reply): I am most grateful for the interest in and appreciation of what I had to say. I would gladly talk about Amsterdam for another hour. In dealing with Amsterdam, I wanted to illustrate method rather than architecture. It seems to me that the important thing is the planning method in dealing with



Plan of Sloterveer, Amsterdam. The recreational facilities include a lake. The park system defines the residential neighbourhoods.



Communal garden in an Amsterdam housing scheme

residential areas. All that I can say is that when you are in any part of Amsterdam, including the new suburbs, you feel that you are in a city; there is an urban atmosphere. In the Berlage section, which was built for the most part before the last war, you get very much the atmosphere of Bloomsbury. I think that the real trouble, as Professor Holford said, is the high density. There is no room to manoeuvre. If you are to get proper daylighting in the blocks of flats, and even some of the terraces of houses, you have to be very careful about orientation and space between buildings. Another interesting point about the very rational ordering of the buildings is that they are working on perfectly flat land. It was just a sandy waste when they started, without even a tree and with no movement at all in the land. It must be very difficult to conjure up the fantastic and to get variety in those conditions, especially if you are a man with a scientific, philosophical attitude, as Mr. Van Eesteren is. Personally, I do not like the over-rigidity. They could avoid it, but it would be very much more difficult than if they were using lower densities. They work normally at double the densities usual in this country.

I agree very much with Sir Charles Reilly about the need to consider the human side all the time in any layout. I would suggest that a little more humbleness of approach is necessary on the part of some of the designers of residential layouts in particular; there is so often an attempt at the pretentious or geometrical, instead of letting things come more naturally, once you have the programme. Variety, I feel, comes with the programme, with the mixing of the various kinds of dwelling, the contrasting of blocks of flats with the sweep of a low terrace of houses, the placing of trees, and even the very small buildings

for the old folks. None of us like the universal street and the universal house, and they can be avoided if you work out a basic programme of human needs.

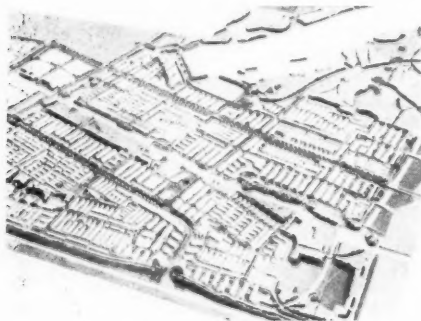
Professor Holford referred to the need for experiment in building layout, and I feel that that is essential. We have to produce a little more audacity and catch some of the spirit of the Victorians in the great building period.

Curiously enough, as Mr. Culpin pointed out, Howard and Unwin and the other pioneers foresaw almost all the points which have come up in the discussion. Experiment was one of the things that Howard emphasised several times in his little book, which nobody has read, or at least which very few of his disciples have read, on the *Garden Cities of To-morrow*. He emphasised that the first Garden City would not be so good, because it would be so very experimental, and that the second would be better. He looked forward to technical improvements which would help, and even had visions of bulldozers and mechanical trenching machines and all kinds of things which did not exist at that time.

I did not quite understand Major Carter's point about satellite towns. The satellite towns to which I referred in the London region are labelled as such on the plan, and I think that they really are satellites, revolving round London. The curious mixture of "satellite suburb" was deliberate; it was called a "green belt town," and yet it was in fact a suburb to Washington. In effect, it was a very pleasant little bit of suburb put five miles beyond the edge of Washington.

I appreciate the danger to which Mr. Reed refers in connection with standards. That is particularly a danger in building standards; I am not sure whether the fundamental standards in planning are at all dangerous. If we set high standards, as we are doing to-day, which are beyond what we are going to get in some cases, they represent something to strive for, and broad standards of that kind do not imply dullness, because within them there can be infinite variety. The architects using planning layouts are using the topography and getting a sensible programme on which to base their design, with the full variety of types of houses and other buildings. We do want to have very much more imagination and freedom in our approach to the architectural problems involved, and especially the detailing of groups of dwellings.

I was talking recently to a deputy in the new French Government, a man of about thirty who had been in a concentration camp for three years. It is a long time since I have heard anybody talk so sensibly about architecture. He was talking to several Beaux Arts men, and he asked them to be humble in their approach to the fundamental human problems and needs of to-day. That word has stuck in my mind ever since, and it is a very good thought on which to conclude.



The model of Sloterveer. Models of new developments are always prepared beforehand and are on public view

FUTURE JOURNAL POLICY

By The Editor

The Present Journal

"Never begin with an excuse" is a rule of journalism (and of life) which we propose now to break. We want first to tell members why the JOURNAL is as it is at the present time—in other words to make a brief survey of the past and present before describing policy for the future.

Before the war the JOURNAL was a good production for its time and considering its peculiar circumstances, though many members seem to have forgotten what it was then like. Looking back at old numbers and remembering the general standard of architectural journalism of those days; realising that the JOURNAL is essentially a *service* production with a very large circulation (and not a luxury one with a small circulation); considering that the Bye-laws require it to contain much rather dull official matter; it did its peculiar job rather well. Few members complained of it and many praised it.

At that time the editorial staff consisted of the Editor-in-Chief, who was also the Librarian, the Technical Editor, who was also Secretary to the Public Relations Committee, their two secretaries and a whole-time draughtsman. On the outbreak of war the Technical Editor and the draughtsman departed to government and military service respectively and one secretary left to get married.

Journals do not produce themselves, though some people appear to think they do, and two-fifths of a small staff cannot be expected to achieve as much as a whole staff. At that time the financial future of the R.I.B.A.—and indeed of the profession—was very dark. So it was decided to reduce the annual number of issues from 20 to 12. Paper control came later and reduced the size of each issue. The progressive development of architecture, which it is the job of a journal to record, reflect and stimulate, ceased almost entirely. Other members of the R.I.B.A. staff also departed, which meant that the few who were left had more to look after. Printers became more and more harassed with labour difficulties; even now the printing situation is about as bad as ever it has been. Blockmakers took almost as many weeks on a job as they once took hours, and they still do.

Thus the JOURNAL faces its future at what we hope is the bottom of the ebb tide. A new staff has to be obtained and trained. The printing, blockmaking and, above all, the paper situation must improve. The first two are largely bound up with the release of labour from the Forces and the reorganising of plant by printers. The nation's paper depends to some extent on dollar exchange. Nevertheless we are looking hopefully towards an era of architectural progress in which the JOURNAL will be a first-class service for busy members.

Peculiarity of the Journal

As the journal of a professional society, the JOURNAL is quite unlike a trade-owned publication and fulfils a different function. The weekly trade journal is primarily the architect's newspaper. It provides news, reports of current events, illustrates the newest buildings and the results of competitions. The monthly trade journal is a magazine. The R.I.B.A. JOURNAL is neither; comparisons between it and trade journals are therefore largely valueless. The functions are different; the material and the methods of handling it are different; that it is a fortnightly (in normal times) gives it a publishing schedule which is neither so hurried as the weekly nor so leisurely as the monthly; it is an official journal and must carry a certain volume of official announcements, as required by the Bye-laws; it has a very heavy circulation, which brings in no revenue, so that the weight of each issue and distribution costs must be watched carefully; above all, it is not a general architectural paper but a journal solely for those architects who are members of the R.I.B.A.

It will be seen that the JOURNAL does not compete with the trade journals, which have their own distinct functions. They cover matters which the JOURNAL cannot touch, and *vice versa*. An architect should therefore read one or more trade journals, as well as his own JOURNAL, if he is to keep himself fully informed of current affairs.

Recent History

As the end of the war began to approach, the Council decided that the future of the JOURNAL must be examined and a policy for it formed. It was realised that changed times would have to be reflected in a changed JOURNAL. There could be no question of merely returning to a pre-war policy. Therefore decisions had to be made on the kinds of service it should and could render to members, on the form it should take, and on resulting questions of organisation, finance and staff.

Looked at broadly, the JOURNAL had not hitherto served all members in the directions and to the full extent which were possible. It had tended to appeal rather to certain specialist interests than to the general body of members. It contained too many lists. Above all it failed to report Institute activities in such a way that all members could themselves answer the question "What does the Institute do?"

These were generalisations which needed close study to find out how far they were true and what could be done about it. Therefore a special Journal Committee was convened by the President, who himself took the chair. The members were drawn mainly from the Executive Committee.

In the summer and autumn of 1945 a detailed analysis of the functions and finance of the JOURNAL was made and submitted in a report to the Journal Committee. The Committee approved the proposals in the report and submitted a *précis* of them to the Council. These were approved by the Council at their December meeting. In this article we are giving extracts, with comments, from the main report so that members may understand the reasons behind what is proposed. But first, the terms of the *précis*, or short memorandum, approved by the Council, give a general picture.

Proposals in General

The following are the principal recommendations for the future JOURNAL as stated in the short memorandum:—

1. Generally improve the quality and extend the prestige and authority of the JOURNAL.
2. Make the JOURNAL appeal to and reflect the interests of all classes of Institute membership.
3. In basic policy the JOURNAL to be principally the vehicle for:—
 - (a) Recording the proceedings (*e.g.* Sessional Papers) and business of the Royal Institute.
 - (b) Recording progress in architecture by analytical illustration of selected outstanding current buildings, both British and foreign.
 - (c) Publishing cultural and historical studies in architecture.
 - (d) Acquainting members with technical and scientific progress in architecture.
 - (e) Acquainting members with changes in professional practice and law.
 - (f) Informing members on current R.I.B.A. activities and generally undertaking propaganda among members for the R.I.B.A. as an institution.
 - (g) Recording and describing additions to the literature of architecture.

4. Improve the presentation and readability of the JOURNAL by :—
 - (a) Improvement of cover design.
 - (b) Providing in a fixed position in every issue an informally written column to acquaint members with current R.I.B.A. activities.
 - (c) Increased use of and better illustrations.
 - (d) The making up of each issue with items of contrasting interest so that any series of issues will have a wide appeal to all classes of membership.
5. Increase the number of editorial pages from the pre-war average of 54 to a maximum of 60. Increase the number of advertisement pages from a maximum of 52 to a maximum of 59 (including cover space). Eventual increase in issues per annum from 20 to 24.
6. Provide a staff of sufficient size and capability to produce twice monthly throughout the year a live and progressive JOURNAL.
7. A new numbered series of "R.I.B.A. Technical Papers" to be created, consisting of pamphlet reprints of articles from the JOURNAL that are suitable for reference. The papers to be on sale at a small charge. A small fixed annual grant to be made by the Council for financing this service. To be operated by the Librarian, in collaboration with the Editor.
8. The Editor to be responsible for producing :—
 - (a) Handbooks of R.I.B.A. Exhibitions.
 - (b) Other Institute publications (except the Kalendar and routine printing).
9. The present volume (October 1945 to September 1946) to be regarded as transitional. Extra issues (above 12 per annum) to be provided as paper ration allows.

Membership

The steady increase in Institute membership, though heartening as an indication of general Institute prosperity, is little short of a nuisance to the Editor. The ideal condition, so far as JOURNAL finance is concerned, would be a small circulation covering the principal architects of the country. Much the same advertisement revenue would flow from a circulation of (say) 8,000 as from one of 13,000; the cost of printing and distributing the additional 5,000 copies is merely an added charge. But far from restricting the numbers of JOURNALS issued we want every member to demand his JOURNAL as his inalienable right and as being of personal service to him.

From 6,850 in 1930 the membership (i.e. the JOURNAL circulation) rose sharply to 9,750 in 1934. It then remained stationary for two years, after which it climbed steadily to its present figure of 13,100. Thus the R.I.B.A. membership (Fellows, Associates, Licentiatees and Students) has almost doubled in the last 15 years. It is still increasing steadily.

Reader Interest

On this matter the main report says :—

"The diversity of members' interests makes unrealisable the aim of interesting all readers all the time. Very few members can be expected to read the whole editorial. But every member should expect to find something to interest him in each issue."

"As a cardinal principle each issue of the JOURNAL should be designed to cover a variety of interests with contrasts of matter, manner, form, illustration and length in the various items so as to create an entity which is not only interesting over wide fields, but which looks interesting to the casual "flipper-over" of pages. The nature and quality of material available at any one time naturally influences make-up, the ideal issue being hardly ever attainable. At the same time there must be some degree of contrast between each issue and its immediate predecessors, so that the reader is led to expect something new and interesting in each issue. The general aim should be to cover all interests as often as possible."

"Issues that are devoted to a single subject, such as the Annual Report and the "Schools Number" are undesirable. They break the continuous cultivation of reader interest.

Theoretically all members should be interested in the Annual Report and in architectural education, but in fact they are not. It is recommended that the old procedure of printing the Annual Report as a separate publication be reversed to."

"Reporting of the annual prizes and studentships should be drastically altered. Prize drawings rarely reproduce well in black and white to a greatly diminished scale. Criticisms of competing designs (under a *nom de plume* and not illustrated) have a one-man reader interest only. It is recommended that a short well-written independent survey (possibly by the official critic) with a few drawings which give clarity in reproduction, be substituted for the present lengthy verbatim report. The survey should be as much a guide to future competitors as a criticism of present efforts."

"Editorial discretion as regards length of reporting (or even omission) should be exercised on such matters as the speeches and attendance lists at the Annual Dinner, Conference and presentation of the Royal Gold Medal. The Annual General Meeting must, however, be fairly fully reported, though even here editorial cuts of verbiage may be made."

"As a general rule articles of inordinate length should be avoided because they have a bad effect on general reader interest and on the appearance of an issue. Hitherto it has been a general practice to print such articles whole in a single issue. The only workable solution appears to be that of serialising unduly long technical articles in two or even three issues, as has occasionally been done in the past. This does not apply to Sessional Papers which must be published in one issue."

"Practice in production of a journal should never be rigidly fixed. A journal that does not progress with the times is on a downward path. While general appearance and format should be constant over fairly long periods (at least three or four volumes), the editorial staff must be continually on the alert to improve, always receptive of new ideas, possessing a 'news sense' for advances in architecture and technique, experimenting in methods of presentation and generally moving with the times. By this, the continued interest of members will be aroused and maintained. Each issue is therefore a separate fortnightly battle to be planned, fought and won."

"The JOURNAL has always been and must remain mainly literary in character, that is to say, it must convey much of its information in the form of words, rather than in pictures. Unfortunately architects as a class are not so receptive of information and ideas through the medium of words as they are through the media of photographs and drawings. They are far more interested in a page of drawings than in a page of words. While, therefore, the JOURNAL should attempt to improve on its pre-war number of illustrations, specially by conveying technical matters by drawings rather than by words, the fact that the JOURNAL must be mainly literary is an unavoidable handicap. Nevertheless with careful editing it can achieve a general good appearance as well as being readable."

Institute Affairs

It has long been apparent that many members have but hazy ideas of the business of the Institute. They take for granted, without always considering the Committee and office work entailed, such well-known services as the careful maintenance of the Competition Conditions, requiring repeated negotiations with promoters of competitions; the establishment of Scales of Charges with Government Departments; the never-ending work on the standard Form of Contract; the careful watching of the integrity of the Code of Professional Practice. These are essential parts of the architect's stock-in-trade; if the Institute never did anything else, it would still be giving members a valuable service.

The enormous and never-ending work of the Board of Architectural Education is but little regarded by the majority of members who have got past its fences—fences designed and

maintained to improve the general level of professional competence. The Architectural Science Board to most members is a matter of reports and lectures published in the JOURNAL; they ignore the fact that it has numerous representatives serving on various outside committees such as those of the British Standards Institution. Indeed, over 100 members serve on various Government Committees, B.S.I. Committees, etc.

They occasionally see an R.I.B.A. exhibition or references to architecture in newspapers and fail to realise that the Public Relations Committee has been at work. The Town and Country Planning Committee, the Housing Committee and the School Building Committee are continuously busy with the Government Departments in their special fields. The work of the Library is steadily growing, as is only to be expected with the largest architectural library in the British Empire. And when a member comes into No. 66 Portland Place and says (as one did recently) "Why did the R.I.B.A. do nothing about the L.C.C. transferring its housing from the Architect to the Valuer?" there is obviously something very wrong.

It must be admitted that generally the fault has been at headquarters. It has been taken too much for granted that all members know and understand the work of the Institute. It has not been realised enough that members are busy doing their own jobs and cannot be expected to know about these matters unless they are regularly presented to them in readable form. At the same time, any democratic corporate body is exactly what its members make it. There are over 600 members serving on Institute Committees. While these members devote much thought, time and labour to the business of the Institute, there are unfortunately others who do not realise that their personal interest, if not positive action, is an essential driving force behind their Institute.

The Council therefore decided that the JOURNAL should regularly report Institute proceedings to members. They were encouraged in this decision by the welcome accorded to the "R.I.B.A. News," issued during the past two years to Service members. On this subject the main report says:—

"In the past the Council has published official announcements from time to time, summarising their principal achievements in the field of architectural politics and announcing (usually in dull and brief notes) the establishment of new activities. There has been little or no attempt to inform members on the aims, scope and hoped-for results of such activities—in fact to create a knowledge of and enthusiasm for the corporate activity which is the R.I.B.A. The Council has now directed that this work of education about the activities of the R.I.B.A. among architects must be undertaken. Assuming that the JOURNAL is made more generally read by members, there can be little doubt that it is the principal medium for achieving this end. It is therefore recommended that there should be a 'columnists' section in the JOURNAL entitled 'R.I.B.A. News,' placed always in the same part of the JOURNAL and written informally. On no account should the column be in 'official' phraseology. Where it is wished to convey an official statement to members it should be printed elsewhere in the JOURNAL and referred to in the column. The column should be primarily a commentary on current affairs. It should not attempt to cover the wide field of the news columns of the trade journals, but confine its scope to R.I.B.A. Council and Committee affairs and to the immediate sphere of R.I.B.A. interests. Its outstanding difficulty would be that of referring to matters in hand, on which the Council has not yet made a final decision, without appearing to commit the Council."

Illustration of Buildings

The main report says:—

"The JOURNAL should not attempt to follow the practice of the trade-owned journals of illustrating all current new buildings of importance. This is one of the tasks of a weekly journal which acts as the architect's 'newspaper.' However, the weekly trade journal can only illustrate buildings super-

ficially, whereas the R.I.B.A. JOURNAL can and should make a careful analysis with specially-prepared drawings of those buildings which show new ideas in their class, particularly those which present new ideas in design, planning or technique. A principle of policy should be to record progress in architecture for the benefit of members. The field is not limited to Great Britain. Further, this policy allows 'group' illustration of the regular work of official architects' departments (e.g. the Miners' Welfare Commission, Leeds Housing Department and the Land Settlement Association). Selection of buildings or groups of buildings for illustration must be in the hands of the Editor, because the only criterion for selection is reader interest."

Scientific and Technical Progress

Again the main report:—

"Under this head come articles by scientists, research workers and architects on such subjects as the behaviour of materials, structural theory, social surveys, planning and equipment of specialist buildings, etc. These are usually full and authoritative pronouncements by experts and as such are important. Sometimes they are abstruse and sometimes lengthy. Technical progress is also covered by the Review of Construction and Materials which is essentially a series of notes on items of technical 'news,' gathered from new research publications, exhibitions, etc.

"It must not be forgotten that the bulk of the profession is not trained in science and that many scientists are not skilled in the craft of explaining their subjects to non-scientific persons. Every effort should be made to bridge this gap. Explanation by illustration is preferable to illustration in words. The present policy of complete severance of editorial and advertisement pages must clearly be continued, in respect of any discussion of trade products."

Some amplification of these rather general statements is perhaps necessary. Under the heading "Scientific and Technical Progress" come all those matters which cannot be truly labelled as design, history, practice or literature. In other words, the heading covers the technique of building construction in all its aspects, the contributions of scientists and research organisations ranging from such matters as the sociological basis of architecture to the science of materials, the planning of different types of building, the everyday experience of members on building matters, new industrial developments, etc., etc. Someone will probably quibble that no hard and fast line can be drawn between these subjects and design, history and practice. That is true, but rather beside the point. Obviously any one article may, and probably must cover all the aspects of an architectural problem. There are four ways in which scientific and technical progress will be covered:—

1. Architectural Science Board lectures and reports as well as those Sessional Papers on subjects of these types.

2. Specially contributed articles by experts. It is proposed that these be written with special regard to the member who is not scientifically trained, that they be relatively short and, if the subject requires treatment at length, that they be serialised over two or three issues. Nevertheless, if the co-operation of the scientist is to be obtained, he must be allowed to publish his work in his own language describing for the expert a statement of his problem, the methods he used to explore it and his conclusions. Such articles, which will be relatively infrequent, are for the specialist rather than for the general body of members. They will help to maintain the position of the Royal Institute as the centre of architectural learning. Therefore, while the co-operation of scientists and research workers is being sought to explain the findings of research to non-scientific readers, there will be occasional articles of the other type which are primarily for the information of the architect scientist.

3. The Review of Construction and Materials. This is a pre-war feature to be revived. It will be a series of notes, illustrated by sketches where necessary, drawn from research publications, visits to trade exhibitions, the publications of manufacturers,

etc. It is hoped that members will contribute to it items from their own experience, both original and relating to matters described in previous issues. This feature will be in the hands of a special contributor, in the same way as the present Practice Notes are contributed.

4. The method of illustrating buildings will have a strong technical bias.

Cultural Studies

Historical, biographical and literary studies are an old-established feature of the JOURNAL and an important contribution to architectural learning. Nevertheless the profession is to-day tending to look forward rather than backward, in consequence of which the field of reader-interest (as well as the potential number of authors) for this type of article, is tending somewhat to diminish. The proportion of editorial space, relative to the whole, devoted to this type of article should therefore not be unduly large. It is hoped that the increase in editorial pages will allow something like the present extent of space to be maintained.

This class of subject is partly covered by Sessional Papers, but the JOURNAL is indebted to many persons, both members and others, who freely offer the results of their researches for publication. An example of the type of article referred to was published in the last issue, namely "The Structure of Salisbury Cathedral Tower and Spire." That the bulk of the editorial will be devoted in future to what one might call the "modern side" should not lead members to think that such contributions are no longer welcome. The contrary is the case. Architecture is a whole art and we should fail in our duty if we neglected any aspect of it.

Library Accession Lists, etc.

During the last 15 years almost every issue of the R.I.B.A. JOURNAL has included the extensive lists of Library Accessions and the Review of Periodicals prepared by the Library. These lists have clearly been of great value to a small number of members and a rather larger number of institutions, architectural schools and libraries who have used them as the basis of their own bibliographical work. The Reviews of Periodicals have provided a useful source of reference to practising architects.

It has been decided that the space occupied by these lists must be given to matters of rather wider general interest. The Library Committee hopes to arrange a method of publishing bibliographical information from the Library in a form that will be no less useful and no less widely available than heretofore. Until the full scheme for their publication in the new form has been arranged, the Review of Periodicals will continue to appear in the JOURNAL; but the Accession Lists will not hereafter be printed in their full form in the JOURNAL but will be available in galley form to all previous special subscribers to the reprints from the JOURNAL and to all others who wish to make application for them. Members who are interested to receive these lists should write to the Librarian.

Other Features

The Book Review columns will continue and, as more paper is obtained, be as extensive as they were before the war. The Practice Notes, Correspondence columns and Obituary notices will continue also in their present form. The official notices, membership lists, notes, members' column, competition notices will remain unaltered, the publication of most of them being obligatory under the Bye-laws.

The Advertisement Pages

It is a source of satisfaction that so many members have complimented the JOURNAL on the good appearance and usefulness of its advertisement pages, but much remains to be done. We will make every effort to see that the advertisement section forms an integral part of the JOURNAL as a whole and is a service on which members can depend in every possible way.

It is our policy that only firms of recognised standing in the Building Industry are invited to advertise, and we will publish the greatest possible variety of advertisements so that eventually

members will be able to obtain from their own JOURNAL entirely trustworthy information covering a wide field.

Appearance of the advertisements and the value of them to members we think is steadily improving, but in this respect we will be helped by the comments of members (see below).

It is not the intention of the Institute to run the JOURNAL in any way at any time as a profit-making undertaking; the Council has imposed a limit of 59 pages of advertisements: this number will not be exceeded.

R.I.B.A. Technical Papers

The starting of this new series of publications is being put in hand immediately. It is known that some members cut out useful reference articles from architectural papers and keep them in box files. Others have their JOURNALS bound and make use of the index. It is hoped that this new series will provide a really convenient system of reference. Details of the scheme will be announced in the next number.

Readers' Wishes

The R.I.B.A. JOURNAL exists solely for the benefit of members. The Editor does not have to please a board of directors or provide profits for shareholders. Our course is therefore clear; it is to provide members with a really alive, informative and useful service JOURNAL. For this we must know what members want. So it is proposed to create a service of "Reader Critics," drawn from all classes of membership and according to the type of practice, on a statistical basis. Reader critics will be invited individually—though volunteers will be welcomed—to submit brief reports, three or four times a year, saying what they like or dislike in both the editorial and advertisement pages, and why. By this means we hope to keep a constant check on progress.

It should be emphasised that the JOURNAL does not exist to serve the particular interests of any one group, or groups, of members. Even that it is liked by the majority of Council members is not necessarily evidence that it is read and used by members generally, though that would be a guide. The only sure way is to undertake "reader research," in much the same way as the B.B.C. undertakes "listener research," or certain manufacturers "consumer research." A start will be made with a hundred Reader Critics, the number being limited at first to that figure so as to get the system working on experimental lines and to keep it within the capacity of a new, partly-trained staff. If it is successful and as the system begins to run easily, the numbers will be increased to, it is hoped, five hundred.

The Immediate Future

Members must not expect an immediate and rapid improvement. We stated some of the present difficulties at the beginning of this article. A staff must be collected, a good production system must be established and the staff become expert in working it. Architects will have to build buildings for us to photograph and illustrate. A good "head" of articles in hand must be collected. Experiments must be made (some of them may not come off) and all this will have to be done while the issues are regularly turned out. The main report said that the present volume will be regarded as transitional and that no major changes will be undertaken until the new volume starts in October next. But our principal uncertainty is the paper supply. We have enough to start an occasional fortnightly issue, and hope to do so during the current volume, but nothing like enough for our proposed regular issue of twenty-four or twenty-six issues per annum of 50 to 60 editorial pages each. For full implementation we are therefore at the mercy of something which is beyond our control.

The printing industry is also extremely congested with work and short of labour at the present time. We cannot yet begin to return to our pre-war time schedule of production; for some months yet the JOURNAL is likely to be late in publication. But time and organisation can reduce the delays.

Our present hope is that we shall be running the full JOURNAL as outlined above within eighteen months. Meanwhile the comments and suggestions of members will be welcome.

PLASTERING*

H. ANDREWS, B.Sc.

Of the Building Research Station of the Department of Scientific and Industrial Research.

A Paper read at a Meeting of the R.I.B.A. Architectural Science Board on
Wednesday, 2 January, 1946.

H. V. LOBB [F.], in the Chair.

Definition

Plastering is a term which is often indifferently used to describe the application of certain types of plastic materials to both interior and exterior surfaces. For the purposes of this lecture, however, I shall define plastering as "The application, to interior surfaces, of mixes based on lime, cement or a calcium sulphate plaster, with or without the addition of sand or hair. They are applied while plastic and harden after application."

The Functions of Plaster

The operation of plastering is necessarily somewhat messy, and is frequently looked upon with disfavour by architect and client alike. The question may perhaps then fairly be put, "Why plaster at all?" With this in mind, it may be useful to consider for a minute or two the main functions of a plaster finish. In general, it may be said that the primary function of a plaster finish is to cover up unevenness in the background and to provide a smooth surface suited to the application of the final decorative finish, and which is hygienic. In addition to correcting unevenness, it may be used for correcting the errors in general line and level of the background. The degree to which either of these corrections are necessary will vary considerably with the type of background and with the quality of workmanship and equipment available. The smoothing out of these inequalities may or may not produce a surface suitable for final decoration. Such a surface should, in addition to being smooth, possess uniform suction so that unevenness of colour or texture may be avoided in the final decorative finish. This requirement frequently dictates the character of the plaster finish and it is met far more easily on some backgrounds than on others. The quality of the finish required will, naturally, vary with the type of building, the position of the area concerned with relation to lighting and so on, and with the type of decorative finish finally to be applied.

In special cases, a plaster finish may fulfil the following additional functions:—

- (1) To give added resistance to spread of flame on such backgrounds as insulating fibreboards. Plaster finishes are classified as incombustible and non-inflammable under B.S.476 and fall into Class I. "Surfaces of very low flame spread" in the classification of the surfaces of materials in terms of flame-propagating properties.
- (2) To give added fire resistance, for a plaster finish may, in certain cases, enable a structural element to be given a higher fire resistance grading.
- (3) Certain specially designed plasters have high coefficients of sound absorption, but these must be considered as being in a class apart for their function presupposes that they must not be given the smooth finish which, in general, is the main characteristic of plastering.
- (4) Properly executed decorative plastering may have considerable artistic value. This aspect of plastering has been seriously neglected for years, but is one which, it may be hoped, will claim the attention of architects in the future.

Consideration of these possible functions of a plaster finish suggests that, in some cases at any rate, it may be functionally unnecessary. A normal dwelling, however, without a plaster finish, would fall far below those conventional standards of taste to which we are accustomed. There are types of dry finish which avoid the need for plastering, but they frequently have characteristics which do not commend themselves to designers

nor to the general public. Their most general defect is the presence of joints which themselves dictate the final design and which destroys that freedom of choice for the decorative finish which is so admirably provided by an unbroken plaster surface. For these reasons it seems likely that, for the present, at any rate, a plaster finish will generally be regarded as essential.

In certain special cases of infrequent occurrence except perhaps in large buildings, the application of a plaster finish is undesirable. There are, for instance, types of acoustic finishing materials whose high sound absorption is seriously reduced by the application of a plaster finish.

Inter-relation of Plastering and other Building Operations

It is of importance that, during the building operations, consideration should be given to the provision of a background which has the correct characteristics for successful plastering. Much unnecessary trouble and expense may otherwise have to be incurred in the preparation of the surface before plastering can be attempted. The point may be illustrated by reference to *in situ* concrete. Smooth greasy surfaces may be produced by the use of some forms of shuttering while uneven surfaces with projecting fins are given with others.

In the first case cleaning and hacking are necessary before plastering if adequate adhesion is to be obtained and, in the second case, troublesome levelling must be carried out in order that an unreasonable thickness of plaster is not needed. These difficulties can readily be avoided by suitable steps taken during the casting of the concrete. The shuttering should be well-designed and a key provided for the plaster by the use of surface retarders and/or the use of mechanical key-forming devices. Joints in brickwork, etc., should be suitably raked as work progresses, and the type of mortar chosen so that extreme differences in suction between it and the building unit are avoided.

In addition, a suitable time interval should be permitted before applying plaster to a background built by wet methods. This is important for all materials in order to provide the correct suction characteristics, but is of even greater importance when the background consists of materials which have an appreciable drying shrinkage, e.g., those containing cement.

During plastering operations, care should be taken to ensure that there is no excessive vibration of the surface being plastered. This is of special importance during, and for some time after, the application of the first coat of plaster to ceiling laths. Any weakening of the keys during this period may result in subsequent failure.

After plastering is completed it should not be necessary to disturb it in order to embed pipes, conduits, etc., or to install fixings. All this work should have been completed before plastering commenced.

Materials

It is clear from the definition of plastering, that the materials with which we are chiefly concerned are lime, cement, plasters based on calcium sulphate, and sand. Nearly all these materials are now covered by British Standard Specifications and it is of importance that the correct type of material is chosen on the basis of these specifications. Lime, for instance, should not only be required to conform with the relevant Standard but should be specified as quicklime, or hydrated lime and whether

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it should be Class A or Class B. All the types of lime found in this country, with the exception of eminently hydraulic lime, are covered by the British Standard. It should, however, be noted that, while the quality of a quicklime may be guaranteed by the British Standard its effectiveness in use is also dependent upon a correct slaking procedure. There are certain types of lime, notably hydraulic and magnesian lime, commonly used in certain areas of the country, which require a rather special technique of slaking. Neglect of it will produce an unsatisfactory material. On the other hand, a hydrated lime which conforms to the Specification needs only to be mixed with water before use and will not, therefore, give trouble. It is for this reason, together with the maturing time essential to produce a sound putty from quicklime, that the present tendency is towards the use of a hydrated lime. The disadvantage of present-day hydrates is that they give a putty of inferior working qualities to that produced from a comparable quicklime, but it may be hoped that technical development may overcome this disadvantage. The most troublesome defect in a lime which is used in plastering mixes is that of unsoundness. This is produced by the presence of particles of quicklime which have escaped hydration during the preparation of the lime, but which are capable of slow hydration at a later date. The process of hydration is accompanied by an increase in volume, which may bring about either an overall expansion of the plaster or localised defects usually known as popping or blowing. The present-day tendency to strengthen plastering mixes based on lime by the addition of a gauging material increases the importance of soundness. Unsoundness does not manifest itself except when the material has become sufficiently rigid to oppose the forces set up by the hydrating process. Thus an ungauged lime mix may remain weak long enough to be able to accommodate the expansive forces exerted by the hydration of some unsound lime particles. The addition of some quick-setting material reduces this interval, and any subsequent hydration of unsound particles is likely to produce troublesome defects. It is for this reason that, in the Code of Practice, certain limes are required to pass a more severe soundness test when used in gauged than in ungauged mixes.

Lime is frequently added in small quantities to plastering mixes based on cement or a calcium sulphate plaster in order to improve their working qualities and for this purpose it is obvious from what has been said that a lime putty of good working qualities has advantages.

Portland cement and Portland blast-furnace cement are both frequently used in plastering mixes in conjunction with lime and sand and sometimes with sand alone. They should conform with the relevant British Standard Specifications. It is sometimes wrongly assumed that lime in cement-sand mixes is a mere diluent the addition of which is to be deprecated. For most normal plastering the use of a cement sand mix to which no lime has been added is both unnecessary and undesirable. Such mixes have poor working qualities and, with a clean sand, are difficult to apply. They are unnecessarily strong and, during their drying shrinkage movements, exert considerable forces on the background to which they are applied. The shrinkage movements if not completed before the application of the finishing coat, may bring about crazing or cracking of the finishing coat. The partial substitution of cement with lime, particularly a lime putty, markedly improves the working qualities of the mix while the more gradual hardening qualities tend to minimise crack formation. In certain abnormal circumstances, for example, where maximum resistance to abrasion is needed or where persistent damp conditions are likely, the addition of an appreciable proportion of lime is inadvisable.

Plasters based on calcium sulphate have recently been covered by a British Standard Specification under the title Gypsum and Anhydrite Building Plasters. The classification and nomenclature of these materials has varied from time to time and from one authority to another with the result that the position has been confused and, to the layman, unintelligible. The nomenclature adopted by the Committee responsible for the British

Standard may, at first sight, appear somewhat formidable, but it should be remembered that in this, the first specification, emphasis was necessarily on accuracy rather than convenience. It may well be that, in a future revision of the Specification, it will be possible to adopt a simpler and more colloquial nomenclature. In the meantime, everyone concerned should use the present classification and endeavour to fit the proprietary names, with which he is most familiar, into the appropriate class. It is in this way and this way only that correct choice and use of materials can be made.

I have no time this evening to discuss fully the scientific basis of the Standard Specification, but I should like to make one or two points which may serve to clarify the general picture.

Gypsum and anhydrite plasters may be broadly divided into two groups. The first is based on plaster of Paris, or calcium sulphate hemihydrate and covers the first two classes in the British Standard, Class A; Plaster of Paris and Class B; Retarded Hemihydrate Gypsum-Plaster. Plaster of Paris is normally manufactured by heating gypsum, a naturally occurring mineral, to a comparatively low temperature, so that about three-quarters of its combined water is driven off. If this material is mixed with water it sets hard in a short time—so short that it is unsuitable for most plastering jobs. To convert such a material into a useful plaster a small quantity of what is known as a retarder is added and the product is then Class B of the British Standard—a retarded hemihydrate gypsum-plaster. The retarder normally used is an organic material known as keratin.

The second group of materials is based on anhydrous calcium sulphate. This may be manufactured by heating gypsum to a considerably higher temperature than that needed to produce plaster of Paris, so that the remainder of the water is driven off or use may be made of the naturally occurring mineral of this composition—anhydrite. This group covers the last three classes in the British Standard, Class C; Anhydrous gypsum-plaster, Class D; Keene's and Parian and Class E; Anhydrite plaster. Anhydrous calcium sulphate can show considerable variations in its reactivity towards water but in general it can be said to be too unreactive to be useful as a plaster. For this reason additions must be made to increase the speed of set and such additions are known as accelerators. They are added in quite small quantities and consist of salts such as alum, potassium sulphate or zinc sulphate.

One of the main differences in behaviour between these two main groups is that the plasters based on plaster of Paris set comparatively quickly, though the commencement of set may be delayed, and those based on anhydrous calcium sulphate set rather more slowly. It is for this reason that the second group can be more thoroughly trowelled and a smoother and more polished surface thereby obtained. A further result of this is that materials based on plaster of Paris require no damp storage for their complete hydration and hardening and, in fact, benefit from being maintained in a dry condition as soon as hydration is complete. Plasters based on anhydrous calcium sulphate, on the other hand, may vary considerably in their speed of hydration, depending on how hard they were burnt and how efficiently they have been accelerated. As a result of this difference in behaviour between the two groups of plasters it is, in practice, unusual and somewhat difficult to dry a plaster based on plaster of Paris so quickly that its hydration is incomplete whereas in the case of plasters based on anhydrous calcium sulphate numerous cases have been known where the material has been allowed to dry before hydration has been sufficiently advanced. This state of affairs may not be serious if the plaster subsequently remains dry but trouble is likely to arise if moisture gains access to the incompletely hydrated plaster. This may happen either by moisture moving forward from a wet background or by heavy condensation and its effect is to hydrate the material which previously escaped hydration. The phenomenon is known as delayed expansion and its manifestations are a lifting of the finishing coat or disruption of the body of the plaster. A

parallel may be drawn between it and unsoundness in lime plasters previously discussed. Its occurrence is frequently associated with the type of decorative finish applied.

Another important difference is that the second group normally have a lower water/mix than the first group. This means they require less water, in proportion to plaster, to give a mix of the required consistence. Its practical significance is that they give a harder finish.

Lime putty is sometimes added to plasters based on calcium sulphate in order to improve their working qualities and indeed some types of gypsum-plaster are specially designed for use with lime and sand. Lime should not, however, be indiscriminately used with all types of calcium sulphate plaster as with some of the anhydrous group an interaction may take place between the lime and the salt used as accelerator to bring about a delay in the setting process. The presence of lime in an anhydrous plaster containing salt accelerators may also be undesirable from the point of view of its final decoration, an aspect which will be touched upon in a subsequent lecture.

Sand is a material used in large quantities by plasterers and sufficient attention is not always paid to its suitability. It is a comparatively cheap material and uneconomical to transport long distances, with the result that use is normally made of local material whether or not it is suitable. Frequently, too, an excessively dirty sand may give a plastic mix which is easy to apply, but which does not produce the best final result. A British Standard Specification is now available for plastering sands. Its limits are, naturally, wide, but its requirements are such that really unsuitable materials are rejected.

Hair is a minor constituent of plastering mixes but, in some circumstances, it serves a useful purpose. In the proportions normally used, it would not appear to exercise a permanent reinforcing effect, but in mixes applied to wood or metal lathing it assists application and reduces the amount of droppings. The present-day tendency to use mixes based on or containing comparatively quick-setting materials makes the use of large quantities of hair unnecessary. The quality of modern ox-hair has, in the opinion of many plasterers, deteriorated and this can be attributed to the growing use of accelerated methods of removing the hair from the hides. Such severe methods are not normally used on goat skins and, for this reason, goat hair is likely to be more uniform in quality. There is an increasing tendency towards the use of substitute fibres in plastering mixes and a number of enquiries have been received at the Building Research Station concerning their use. There is, at present, insufficient field evidence on which to base a reliable opinion, but it would appear that fibres such as manilla, sisal, ramie, hemp and coconut might well be suitable. Manilla fibre has, in fact, been successfully used by Scottish plasterers for some years, while sisal is a fibre frequently incorporated in calcium sulphate plasters and also in fibrous plaster.

Choice of Plastering Mix

The choice of a mix for plastering may well depend on a number of factors technical in character. There may be others but I shall not touch on them here.

In the first place the characteristics of the mix should be related to the type of background to which it is applied. I cannot hope to touch on every case, but will give one or two outstanding examples. Wood or metal lathing may be taken as an example of a non-rigid background. If a strong plaster finish is needed on such a background one should be chosen which has little movement on setting and drying and which, therefore, does not tend to set up stresses in the background. A heavily gauged cement lime mix would not be suitable on this account, and a calcium sulphate plaster would be the obvious choice. If a weak plaster finish was considered desirable a comparatively weakly gauged lime mix would be suitable.

Plastering over gypsum plasterboard is a case where the choice of mix is definitely dictated by the background. Mixes containing appreciable amounts of lime do not adhere satisfactorily

to plasterboard and certain types of plaster based on calcium sulphate must be used. If a weak finishing coat is really needed on such a background two-coat plastering should be used—the appropriate calcium sulphate plaster may be used in a sanded mix for the coat applied directly to the board and complete freedom of choice may then be exercised for the finishing coat.

There may be many cases, of course, where no such restrictions exist. A normal brick wall may be plastered with almost any type of mix.

The above considerations apply to the first backing coat and the choice may dictate the type of coats subsequently applied. Normally, the second backing coat is of the same or similar composition to the first and it is in the choice of the finishing coat that some discrimination must be exercised. If a weak finishing coat is considered desirable, it may be applied over a similarly weak backing coat or, of course, over a strong one, but a strong finishing coat should only be applied over a strong backing coat. An attempt to apply a strong finishing coat over weak backing coats often results in the finishing coat shelling off or pulling the backing coats away from the background.

The characteristics of the plaster finish should also be related to the type of decorative finish it is intended to apply. This is of particular importance when paint is to be applied and the subject will be treated in detail by a subsequent lecturer.

The actual time interval between the commencement and completion of the plastering operations shows wide variations with the type of mix chosen. When using plastering mixes containing cement and lime it is very desirable that adequate time intervals should be allowed between the application of coats to ensure that the drying shrinkage of one coat is materially completed before the subsequent coat is applied. Such intervals will vary considerably with the climatic conditions but will always be considerably greater than those necessary for plaster mixes based on gypsum and anhydrite plasters. If, therefore, it is desirable that the time interval between the commencement and completion of plastering is as short as possible the plastering mixes could, with advantage, be based on gypsum and anhydrite plasters.

The environmental condition of the plaster subsequent to its application may also influence the choice of materials. Normally, it is considered that a plaster, after its initial drying, remains dry, but there are cases where damp conditions may prevail, e.g., in basements. Plasters based on calcium sulphate should never be used under conditions where persistent dampness is likely to occur and the choice in such cases would be a cement or a cement-lime mix.

Present Trends in Plastering Materials and Methods

The materials used for plastering have not changed fundamentally for centuries. Burnt gypsum or plaster of Paris was used by the Egyptians even before they used lime. In this country, however, the use of materials based on gypsum or anhydrite is comparatively recent and since their introduction their use has steadily increased. The advantages of such materials for plastering suggests an increased tendency towards their use in future building work.

The technique of plastering has also remained unaltered during the centuries and the tools and methods used to-day are not very different from those originally used. Such methods, evolved and used by craftsmen over a long period, may be presumed to be the most efficient for normal work. In our problem of post-war reconstruction, however, we have to face a situation in which there is likely to be a shortage of skilled plasterers and some thought has been given to the possibility of applying plaster by mechanical means. In recent years some mechanisation of such operations has been found possible and convenient. The finishing coat in external rendering is frequently flicked on by a special machine containing a paddle which is turned by hand. Sprays, similar in type to the better-known paint spray, have been used to apply plastering materials while other types of machine have also been designed and used to a small extent for this purpose.

The main difficulty with most of these mechanical applications is that they give a textured finish which may or may not be acceptable. In the machine I mentioned for external work the backing coats are applied by hand and it is only the finish which is normally applied by mechanical means and here it is the aim to give a rough texture. Thus, the mechanical application of a finishing coat designed to have a textured surface is not difficult but is not of major assistance in our problem. Before such a finishing coat can be applied at least one backing coat is normally necessary and this, even if mechanically applied, should have a reasonably plane surface. A combination of mechanical application and normal plastering operations would thus seem to be necessary, but whether such an admixture of craftsmanship and mechanisation would be either workable or worth while is debatable.

The provision of surfaces which are reasonably level and which have no wide variations of suction would tend to simplify the plastering procedure but such surfaces are normally the exception rather than the rule. In solid partition work, for instance, where precast blocks are used and plastering is needed

on both sides a consideration of the British Standard dimensional tolerances suggests that one side at least would not be suited to a mere finishing coat. *In situ* concrete may perhaps give a favourable surface but here the quality of the shuttering would be a most important factor.

I think the whole question of the mechanisation and simplification of the plastering technique rests mainly on whether or not a textured finish can be regarded as acceptable. The main function of a plaster finish is to provide a smooth surface of even suction suited to the application of the final decorative treatment and it has been found that, to do this, the normal plastering technique gives the best results. The requirements for a textured finish are not nearly so severe and a much simpler plastering technique can be adopted.

I have only been able to touch on some of the more general considerations relating to plastering but I am sure you will all be aware that a Code of Practice for Plastering has recently been prepared by a committee set up by the Royal Institute of British Architects. This Code discusses in detail the more specific problems encountered and will, I hope, be widely read.

DISCUSSION

Extracts from Speeches

The CHAIRMAN said that Mr. Andrews had referred to plastering as rather a messy business; that was probably why architects had not paid as much attention to it as they might have done. He was sure, however, that the layman judged a house by its internal finishings, and therefore the present series of talks—the first, a month ago, when Mr. Lawrence had discussed painting, Mr. Andrews now discussing plastering, and Mr. Llewellyn, in a month's time, dealing with painting on plastered surfaces—would, he felt, make a very valuable contribution to the solving of that very difficult problem.

MR. E. H. ELLIS said he was glad the Building Research Station was concentrating some of its attention on that very old but vexed subject of plastering. Some years ago before the war he had been concerned with a small paper called "Plastering Craft" which had been intended originally to be a sort of educational paper directed at plastering operatives, because they were such "messy fellows." He was rather astonished, however, to find that a considerable number of subscribers to that paper were in fact architects who were apparently more anxious to learn about the realities of plastering than the plasterers themselves. In view of that he thought the author had performed a very useful function and service in telling them what the plastering materials were and roughly how they should be used.

Mr. Andrews had mentioned the virtues of using a calcium sulphate plaster for metal lathing. He agreed, but had heard terrible stories about the corrosive effects of plastering materials on the lathing; on the whole he thought there was more justification for using a lime-based material for metal lathing and such work than a calcium sulphate-based plaster. That problem, of course, was also reflected in the treatment of such things as metal conduits that had to be buried in plastering work.

On the question of strengthened coats there was room for considerable difference of opinion. During the last fifteen to twenty years standard practice in this part of the country had been to use cement and sand, possibly with lime, usually in the proportion of something like nine of sand, one of cement, and one of lime as a backing coat, and to finish it with either a calcium sulphate plaster, like sulphate mixed with lime, or with lime alone. That gave a weak finishing coat on what might be termed a strong backing, depending upon whether a lime finish was used or whether a calcium-based plaster was used. He had not seen many instances of failure with that type of plastering treatment, even when pure gypsum-based plaster had been used for the finishing coat.

One of the bad features of modern housing had always been the "ring" with plaster work; he had often wondered whether that was not related to cheap plastering practice of using cement and sand backing with a gypsum plaster finish. He had at times been mixed up with tests on small houses where a lime and sand backing had been used, finished with either lime putty and sand or sometimes with the Keene's cement finish, and he had never noticed the same ring in such cases.

With regard to calcium sulphate plasters not being used in damp conditions; it was wrong to think of even gypsum-based plasters

purely in terms of calcium sulphate. Materials from which that plaster was made were practically never pure calcium sulphate. Plasterers always started monkeying around with it, adding bits of this and bits of that, and the problem of the actual change during the hydration of calcium sulphate had been a subject of bitter discussion in the chemical world. This had modified the working properties and behaviour of plaster more than the main material itself. In that connection Keene's cement had been used in this country for many years. He had known it used on floors and outdoors. In 1939 he knew a place in the Midlands where Keene's cement had been used for external plastering, and he also knew of one wall faced with Keene's cement somewhere about 1880 and which, in 1939 at any rate, was still in good order. The local plasterers used to say, and he thought there was something in it, that the wetter the Keene's cement was kept immediately after setting, the harder it became, and he would like to hear the author's views on that.

He wondered if the author would give a guide on the number of coats of plaster that should be used in specific instances, or if that was a matter entirely covered by the Code of Practice.

With regard to the question of the mechanical devices, there was, of course, a trowelling machine which was used for finishing floors which gave a nice smooth trowelled finish, but he did not know whether it had ever been applied to walls or not.

MR. BRADY said Mr. Andrews had emphasised the importance of suiting the plastering technique and material to the job and he thought the meeting might be interested in two instances which had occurred in war-time where that had to be done. One was the case of a flat which had to be prepared with very great speed for occupation by a very exalted personage. It was necessary to bring the work to a high degree of plastering and decorative finish. In that instance they were able to use to advantage the very rapid setting qualities of gypsum plaster of the hemihydrate variety; and although work was carried out in the middle of winter, it was possible, by applying two coats of gypsum plaster, to finish with quite a high-class decorative paint scheme within a few days, the work being entirely satisfactory.

The case was of a building intended for medical research. It had to be occupied by the W.R.N.S. and again the work had to be carried out urgently. The problem was that the plastering had to be finished on account of the W.R.N.S., whereas the architect was very anxious that the plaster work should not be damaged during the time the W.R.N.S. were occupying it. The scheme devised was that they applied an undercoat of cement, lime and sand, and by using a suitable mix they got a nice light colour finish. Then the work was left in that condition during the war with the intention that, when occupation by the W.R.N.S. had ceased, it would be possible to apply a skimming coat, probably a gypsum plaster undercoat and then the final application. Those instances were mentioned to show how one could apply a knowledge of materials and technique to suit a number of unusual circumstances.

With regard to the use of various fibres in plaster work, he knew there was a good deal of nervousness and hesitation about the use of cow-hair, but he had always felt that this hesitation had been ex-

aggregated. There were cases where quite a variety of fibres had been used and the work had been well preserved. He remembered being told by a plaster manufacturer a good many years ago that it was his practice for a long period to make hemp plaster by using hemp fibre which had been obtained from second-hand rope.

MR. A. E. WILLIAMS said that to-day jobs were sometimes held up by lack of plaster, and he wondered if that was because plasterers had got used to having ready-made finishing plasters, or whether there was a great deal more work attached to applying the hydrated lime which was already mixed in bags, and whether it would be possible to make that more workable by having a small proportion of gypsum plaster with it. There had been a very small allocation to various people of gypsum finishing plaster, but he wondered whether that was really because there seemed to be a preference among plasterers for the gypsum finish.

MR. HURDING said in view of the fact that there were about twenty different types of hydrated plasters and their degree of setting varied from twenty minutes to four or more hours, was there any possibility of getting a standard setting? He believed that in America certain classes were graded with a uniform setting so that the plasterer knew exactly how long it would take.

He thought the question of hair had been rather skimmed over, because the Thistle Plaster Company manufactured stuff with the hair in it; in his opinion that was one of the strongest materials obtainable. He advised its use because of its binding quality, especially where applied to lath work, because it saved the gauge from cracking and breaking away.

MR. BENDELL said he would like to know whether it was preferable to use jute or cotton scrim in connection with plaster board ceilings in view of the shortage to-day and the fact that only thin coats of plaster could be put on.

MR. THORNELOE thought that in his earlier remarks the lecturer seemed to suggest that concrete as a background was liable to contain more moisture than brickwork. He would have thought that brickwork contained just as much as concrete and therefore the same precautions would have to be taken.

He was very interested to hear about the importance of the soundness of lime, either as a lime putty or hydrated lime, when it was gauged with cement or a gypsum plaster. He felt much more attention should be given to the use of the British Standard for lime, because, being introduced early in the war, it had hardly had the opportunity to come into general use. There should be every reason for relying completely upon limes which were properly made; fear of unsoundness should be non-existent.

MR. ANDREWS, in reply to the points raised by Mr. Ellis, said that so far as corrosion of calcium sulphate plaster on metal lathing was concerned, it was always recommended that a special type of calcium plaster which contained lime should be used on metal lathing; if this were used corrosion would be avoided.

The problem of sound transmission in relation to a plaster finish did not arise, because plaster finishes in general could be said to have little or no effect on sound transmission. He agreed that there was a certain tendency to regard hard finishes as having a ringing effect, but so far as objective measurements were concerned, the sound absorption by all types of plaster varied over a small range.

The chief thing to remember about all plasters based on calcium sulphate was that the product consisted of gypsum which was soluble in water so that its use externally was obviously fraught with danger.

On the question of mixing various types of calcium sulphate plaster, in general he thought it inadvisable. Most of those calcium plasters were made very carefully by the manufacturers, and the mixture of one plaster with another of the same type might be all right, but certainly the mixture of two different types would not be advisable.

Mr. Hurdling mentioned standardisation of setting times, with which he tended to agree. It would be a big advance if manufacturers could produce three types of plaster with standard setting times; one undercoat material, one for the finishing coat, and one special type for a particular kind of material.

With regard to the use of jute or cotton scrim for plaster board, the actual function of scrim on plaster board was not very clear. It was usually recommended as a reinforcing agent to prevent cracking at joints. He had heard it said that jute scrim was better than cotton scrim, because with jute you automatically had to put on a greater thickness of plaster in order to get an even surface, which in itself was an advantage. In general he would say that jute scrim would be preferable because the application of very thin coats of plaster to plaster board was known to give rise to cracking troubles, even if you had a body of plaster to the order of 3/16 in. as recommended.

With regard to the point raised by Mr. Thorneloe, he had not intentionally given the impression that concrete contained more water than brickwork. He had no figures on this, but they probably contained the same. The point about concrete, however, was that it contained cement and had therefore a good deal more moisture movement than brick.

As regards the question whether gypsum was used before lime, he was not absolutely certain on the point, but he thought it was historically true that the Egyptians used gypsum before lime because gypsum required less fuel than did lime. Whether anybody used lime before the Egyptians he would not be certain.

Visitors to the R.I.B.A.

Since the end of the war architects and planners from many countries have been taking advantage of the improved opportunities of travel to come to Britain to study British work.

In the coming weeks a remarkably interesting group of visitors are due to arrive. Of these it can be said that none will receive a greater welcome in Britain than the distinguished American sociologist and author, Mr. Lewis Mumford, who comes to England as the guest of the Institute of Sociology. At the time of going to press the actual date of Mr. Mumford's arrival is not known, but he is booked to address a specially-arranged meeting at the Royal Institute on 12 July at 6 p.m. There will certainly be meetings elsewhere in London and in the country which will give British architects an opportunity of hearing and meeting the man whose influence on British planning has been greater almost than that of any British citizen other than Sir Raymond Unwin and Sir Patrick Abercrombie. Lewis Mumford, who is the only non-British Honorary Associate of the Institute, is, of course, best known for his books, *Technics in Civilisation* and *The Culture of Cities*.

We have recently had a visit from Senor Carlos Contreras of Mexico. Senor Contreras, who has come to Britain as a British Council guest, is known to all those who attended the great International Town Planning Federation conference in Mexico City in 1938, of which he was chairman. At the end of his

visit, during which he travelled widely throughout Britain, Dr. Contreras gave a lecture at the R.I.B.A. on Mexican planning and architecture. This will be reported in the March Journal.

In the near future three important visitors are expected from Warsaw, Mr. Stanislaw Dziewulski and Mr. Wacław Ostrowski, both of whom are architects concerned with the reconstruction plan for Warsaw, and Mr. Stanislaw Woyniewicz, who is manager of the Warsaw Sewage and Water Supply Directorate.

We also had the honour of a visit from Szymon and Helena Syrkus. Mr. Szymon Syrkus, one of the Institute's Honorary Corresponding Members for Poland, is now head of the Planning Department of Warsaw Reconstruction Office. He spent the greater part of the war in Auschwitz concentration camp. Helena Syrkus, his wife, is secretary of the Advisory Planning Commission in the Polish Ministry of Reconstruction. Both Szymon and Helena Syrkus played a prominent part in C.I.A.M. (Congress Internationaux d'Architecture Moderne) before the war and have many close friends among the younger architects in Britain.

Two visitors are expected shortly from Greece, Mr. Renos Koutsouris, Chairman of the Greek Architects' Association, and Mr. Thucydides P. Valentis, a specialist in airport design and a town planner who is now demonstrator in the Architecture School of the National Metsovion Engineering College.

HUMAN NEEDS IN PLANNING

Conference at the R.I.B.A.

Few Conferences at the R.I.B.A. have been more successful than the recent one on *Human Needs in Planning* which was convened by the R.I.B.A. Architectural Science Board with the co-operation of the Association for Planning and Regional Reconstruction and the Institute of Sociology.

The conference, the organization of which had largely been undertaken by Miss Tyrwhitt of the A.P.R.R., was one of experts—social scientists, architects, town planners, statisticians and economists—to compare and discuss their methods and findings. A small exhibition of diagrams and maps, contributed by the various groups represented, was on view for a week in the Henry Florence Hall.

The B.B.C. and Press were informed of the conference as a matter of routine, no great public interest being anticipated in what was, after all, a series of highly technical discussions. But, to the surprise of those responsible, the interest was remarkable. *The Times* gave it a first leader, *The Manchester Guardian* a two-column headline, and *The B.B.C.* a talk in the nine o'clock news.

The Science of Social Studies provides the information needed to plan a community, whether a town, village or housing scheme. Teams of skilled interviewers are used who ask members of the public, selected on a statistical basis, a series of pre-arranged questions which are carefully designed to bring out the required information. Modern statistical methods are used to boil down the facts so obtained to the final information. It is, in fact, finding out what the public wants, not only in housing, but in an almost endless range of human needs. The family, of course, is the main field of study.

Social science is comparatively new and its methods have not yet become crystallised into a generally-accepted procedure. Some weaknesses were brought out in the discussions; in particular, the important one that finding out what the public wants does not necessarily give a statement of what the public should have, because the public does not always know what it can get, or what it will like and want some years ahead. But it was agreed that the only alternative was pure guesswork.

The following is a brief account with some extracts from the twenty-four papers submitted. The Conference was opened by Mr. A. L. Roberts (V-P).

Housing Requirements and Population Studies

At the first session, five papers contributed by various specialists and groups were presented for discussion. Mr. D. V. Glass, Research Secretary, Population Investigation Committee, was in the chair. There was considerable discussion on the absence of any statistics relating to the number of various types of family in this country. Mr. Mark Abrams, in his paper, stated that it constituted one of the biggest and most serious gaps in the social data required by those attempting to plan solutions to our present housing difficulties.

"The nearest approach to the subject in official national statistics is to be found in the decennial census. The latest of these, however, was taken 15 years ago, and even those figures are of limited value since the tabulations relate merely to household size and give no information on family composition. Thus, they tell us that over one-fifth of our households contained two persons; but within this very considerable group there were households of widely differing composition and therefore of widely differing housing needs. There were households made up of a young married couple just starting family life; there were some made up of two old-age pensioners, some of a widow with a young child, some consisted of two young working girls temporarily rooming together and so on."

On this same subject Miss M. P. Newton said:—

"It is clear that a family defined as a unit which would wish to be housed in a single dwelling is not the same thing as a family defined by the Registrar-General for census purposes. We do not know how many of the lodgers, mothers-in-law, etc., would prefer separate accommodation if this were made available to them; we do not know for certain even that all the cases in which two normal families live in a dwelling and feed together are cases of forced 'doubling-up.' All that we can say for certain is that the numbers of units of people who would wish to be housed separately are greater than the numbers of census families, and that it is the census statistics of one and two person families that are most misleading.

"As regards the composition of families it would seem that if we know from survey results what proportion of single people of certain ages and what proportion of old people would like to have separate dwellings, the families containing married couples with and without children would be the remaining families whose composition needed assessing. In this respect the assessment required is that of the numbers of families containing children, showing the numbers in which the children are of the same or different sexes, and are in various age-groups. This depends largely on fertility and mortality rates in localities."

Miss Newton also drew attention to the effects of a shortage of housing on the population structure itself. We could not rule out the possibility that the emphasis on the building of small houses by local authorities in the inter-war period may have contributed appreciably to the fall in the reproduction rates. Those responsible for the provision of houses for the people should reflect on this and realise that housing policy must be an instrument of population policy.

Mr. R. Nicholas, City Surveyor, Manchester, commenting on the well-known fact that reduced numbers of births obviously results in a smaller average family unit but not necessarily in a smaller number of families, pointed out that an increasing standard of living gave young bachelors and spinsters and aged persons the opportunity for leading separate and more individual lives. It was to be expected that the single person would more increasingly prefer separate accommodation than living in lodgings and that older people would wish to have their own specially designed accommodation. Also many families, particularly with young children, would prefer to accept flat accommodation in the area in which they spend their lives rather than tear themselves away to a new beginning some distance off. It could be expected that single persons would welcome a type of flat accommodation in which they could obtain some service and that widowers and widows might wish to live in cottage flats which were ideally suited to the needs of those accustomed to a home of their own.

Information obtained from study of the town of Bilston was presented by the Deputy Town Clerk and Solicitor, Mr. A. M. Williams. This showed that out of a total of 7,770 houses in the borough, no less than 2,655 were unfit for human habitation by reason of disrepair and sanitary defects. There were 1,794 houses more than 80 years old and 2,818 were accepted as having exceeded their economic life. There were 745 cases of overcrowding and 709 houses contained more than one family. From the survey it was deduced that 3,831 houses would have first to be replaced as unfit for habitation. Seven hundred houses would be needed to overcome the problem of overcrowding. Therefore the minimum of 4,531 houses would have to be built as soon as

possible. The borough was very congested; there was practically no land available for building purposes in the ordinary sense of the words. The only unbuilt on land in the town consisted mainly of pit mounds, old pit shafts and derelict factories. Thus before building could be undertaken, vast and costly levelling must first be done. Room could not be found even for 100 prefabricated houses without recourse to levelling derelict land.

Mr. Geoffrey Thomas, Senior Research Officer, Social Survey, Ministry of Information, presented a paper on "Population Composition and the Demand for Housing." He stressed the need for an annual or bi-annual field survey taking into account not only the condition of existing houses, but also the relationship between the existing accommodation and the numbers and sizes of present households and families, their economic standing and their composition. His paper gave the summarised results of a series of four enquiries carried out in 1943 and 1944 in sample surveys over the whole country. This work gave such particulars as the numbers of persons in the household, the number of children in the family, family composition generally, members of families absent, present household size and habitable rooms, possible household size by number of habitable rooms, number in household at present and number of bedrooms. This survey showed the possibilities of arriving at precise information which would be used in planning a continuous housing programme.

The Grouping of Homes in Relation to Work-Places and Institutions

Mr. Dennis Chapman, Senior Research Officer of the Social Survey, discussed the definition of the terms "sufficient" and "convenient." He said:—

"From the writings of some authors on planning it would appear that they consider a place to be convenient if it is used by sufficient of the people for whom it is to cater. For some places 'sufficient' is tested by the economics of the situation, i.e., if the cinema pays its way. This test is not, however, available for many places and institutions. It is also evident that the test of use does not help, except in a very long-term way. The test of use implies alternatives and comparison.

"Some aspects of the concept may, however, be studied in another way. Time and distance are important dimensions of convenience—time from the point of view of the subject, distance from the point of view of the town planner. It becomes obvious, however, as soon as the matter is stated, that whilst the physical planner must use distance, time scales will have to replace this when planning for human needs—indeed it might be argued that the plan should first be drawn using time scales (this is implied in the Dudley Report) and then redrawn by translating time into distance."

Mr. M. P. Fogarty, of Nuffield College, discussed the broad question of the responsibility for carrying out social and economic surveys. On this question he was emphatic that it was not the job of the universities whose function was to write theory, undertaking practical studies only so far as they contributed to that end. Nor should the main, or at any rate the sole responsibility rest on the Government. The Government could do and was doing valuable work on both the national and regional levels. But the Government's point of view was not that of the industrialist nor the local inhabitant. Nor could the national Civil Service be expected to have the detailed knowledge—the "feel" of an area or industry—possessed by those who have spent their lives in studying it. He went on to say:—

"There are two main requirements. First, we need a regular series of independent reports on the technical, scientific and commercial prospects and possibilities of British industries. Secondly, there should be a series of institutions specialising in the study of their own regions, and independent alike of the Government and the Universities, though working in close co-operation with both.

"The regional institutions would be mainly engaged in

administrative research, but should have enough academic standing and detachment to be able to produce good fundamental work as well. They should primarily serve the needs of local authorities, business men, trade unions, development councils, and other interests in the region, though co-operating with both the regional and the national machinery of the central Government. They should also be financed and controlled mainly by the local interests, though without excluding the possibility of Government grants or of the representation on their governing bodies of departments such as the Board of Trade, the Ministries of Labour, Agriculture, or Town and Country Planning, or the Scottish Office."

Mrs. R. Glass, of the Association for Planning and Regional Reconstruction, gave her experience on the difficult question of the mixing of social classes. She said:—

"Whilst we find frequently that people of different ages, with different interests and from various distinct territorial groups attend the same institutions, we hardly ever find a mixture of social classes. A given institution is usually attended by a homogeneous social group, by people who are very much alike in terms of their standards of living and occupational level. Institutions which do not actively promote social relationships between their users, e.g., shops, cinemas, libraries, may sometimes be attended by a slightly more mixed social group than those whose function it is to organise such relationships, e.g., clubs. On the whole, different social groups live in separate and clearly distinct geographical areas so that there is neither the need nor the opportunity for them to use the same institutions.

The chairman of this session, Mr. D. Caradog Jones, commented on other papers which dealt with the mobility of labour and of industry. It was pointed out by Miss K. Leipmann, of the Reconstruction Research Group, Bristol University, that the mobility of labour was a live issue in any employment policy. Its implications could not be judged without knowledge of volume, origin and composition of an influx of workers. Further questions to be answered were how long it takes for immigrant individuals and families to be absorbed into local life. It was necessary to determine the "employment orbit" of each town, parish or group of parishes. Were the inhabitants within reach of a fair range of industries and occupations? What mattered was accessibility from the homes of those who had too small a choice of jobs.

Dr. E. Rutland pointed out that so far as London was concerned the chief industries were not dependent on large supplies of cheap power; they tended to use a relatively small amount of mechanical power per employee (e.g., tailoring, dressmaking, furniture, light engineering, printing). They were not, therefore, tied to their sites by physical causes to the same extent as heavy industries. After the first world war improvements in road transport and telephones, the widespread provision of cheap power and the mechanisation of processes had enabled industry to avoid high land values by finding sites away from the centre. Nevertheless, industry was not moving out nearly as fast as population.

The Social Function of Towns and their Place in the Region

Professor G. H. J. Daysh, Professor of Geography, Durham University, was the chairman at the third session at which papers on several interesting regional surveys were discussed. These included Wolverhampton Social and Industrial Survey, Town and Country in Herefordshire, Worcester and its Region, Towns in the Bristol Region, Suffolk and East Anglia. These papers were mostly factual and while very interesting do not lend themselves easily to generalised summary. It was generally agreed that the countryside was suffering from a lack of small industries as well as a settled agricultural policy. Mr. A. E. Smales, University College, London, said:—

"Towns do not belong to the countryside as they once did. In the pre-industrial age urbanism was a plant firmly

rooted in the agricultural life of the countryside. The town was not only in the country, but of it. Modern developments, however, have seen the multiplication on a great scale of other categories of towns, above all of industrial towns, which are often divorced in many respects from the rural life of the surrounding region. Divorced though they may be in outlook, however, they are none the less significant for that rural life, and they are rural service centres."

Mr. K. M. Buchanan, of the West Midland Group, said that while it was envisaged that for certain services such as hospital facilities, rural areas would continue to depend upon market towns, it seemed desirable that many types of service at present either not provided or inadequately, might well be offered in the rural areas, probably in the larger villages. Educational facilities, including libraries, welfare clinics, etc., might well be located in these village centres. The services they would offer would be essentially supplementary to the call for much greater development of inter-village transport to offset the existing excessive concentration on the market towns.

Social Relationships and Territorial Grouping in Towns and Countryside

The fourth session rather tended to overlap the previous one in becoming a discussion on the social and economic organisation of rural England. Miss R. W. James described in a paper a report on the survey of a rural district of the Midlands, selected at random. It was twenty-four square miles of ordinary English farming land such as may be seen almost anywhere in the Midlands and without special characteristics. Of this area she said:

"Investigations show that there has been a steady decline in the population of the area over the last fifty years, representing a fall of some twenty-six per cent. This is characteristic of most parts of rural England and the result has been to produce communities so small as to make efficient social and economic organisation wellnigh impossible. In the survey area there are three villages with populations of just over 1,000 people, but the remaining twelve have an average of under 250, and the smallest has only 168. Many of the drawbacks of the small village are illustrated in the area—the difficulty of providing water-supplies, sewerage and electric light, owing to their high cost; the difficulty of maintaining the social services; the necessity of sending children away from the village for their schooling; the disadvantage of sharing a district nurse; the lack of shopping facilities; the impossibility of supporting the usual recreational organisations.

"Farming appears to have done far less than any other national industry to adapt itself to the conditions of modern industrial life. In size, layout and equipment, there appears to have been no attempt at reorganisation adequate to take advantage of the revolutionary changes which have occurred in farming systems, in technical inventions, in the use and reward of labour. Farms in the Survey area are mainly small, half of them being under 150 acres, and offering no scope for scientific management or for the advancement of labour. The layout of farms is inconvenient, entailing difficulty and wastage in working; many fields are too small for modern machinery, buildings are obsolete, dilapidated and inadequate; water supplies frequently lacking. The position of the farm worker compares unfavourably with the skilled worker in any other industry.

"The evidence of the Survey suggests that the problem of bringing new life to the countryside is not simple, but complex; not an isolated problem, but an integral part of national reconstruction; not capable of solution by a revival of agriculture, but needing at the same time the restoration of a better balance in the rural population."

Mr. F. G. Thomas followed this up by saying:—

"If the countryside is to be revived and become economically well based, each area must be developed to the limit of its agricultural and industrial resources. Its popu-

lation will then be increased and the physical amenities provided for its people. The fallacy that it is cheaper to live in the country must be countered. It is not; it is more expensive both for the individual and the statutory authority, if reasonable standards of life are to be maintained. It is more difficult to starve in the country, which is different and irrelevant."

Mr. Thomas also had some hard things to say about the community centre. He said that the community centre had not solved nor stopped the decline of a single village because it could not touch the economic causes of the decline; nor was it ever intended to do so by anyone knowing rural areas. He went on to say:—

"Much has been done, of course, to build such centres from those attached to schools in Cambridge to simple huts erected as war memorials. Too often they only reflect the bankruptcy of the countryside they were built to serve. The design is unattractive, often ill-designed and lacking in anything but the barest essentials. One has only to contrast them with the church—the community centre of its days—to note the difference. The church was built to enhance the beliefs of a vigorous and increasing population whose village life was lively, if sometimes crude and coarse. The community centre is a pathetic attempt to house and encourage the enfeebled community life of the village whose few inhabitants know each other only too well, and whose lively members have already gone away. The community centre is essential, but it is not a solution to any village problem. It cannot create relationships; it can only house them.

"New relationships will only be extended as new people are brought into the village to work in agriculture and industry. This is possible. It is therefore necessary to consider what new relationships may follow any such development. If the area and not the village is the unit, then the population will be dispersed and not concentrated; if the neighbourhood is to be a social unit, then there must be mobility for all within the neighbourhood; if the rural tradition is to be maintained, then the countryside must predominate over the new buildings and centres of population and—equally important—the proportion of the population in any area working on the land or in associated industry must be greater than that of workers in industries located in but not derived from the products of agriculture.

"Our countryside has been enlivened during the war with men from overseas, our own forces, Land Army girls, evacuees, War Agricultural Committees, new machines on the farm and the excitement of being recognised, at last, as an important front-line effort. But now the troops are leaving, many of the Land Army girls are getting restless, evacuees are growing up and looking for jobs with prospects, the village lads serving abroad, it is said, are not coming back. The excitement of the war is over. The scepticism of the countryman is being awakened again. The stark fact remains that in spite of the war and high prices and wages, the countryside is still not a desirable mode of life to most people when compared with what is possible elsewhere. Only by rebuilding on the twin foundations of a sound agricultural and industrial policy suited to rural areas, can a modern rural society be recreated."

The very brief notes given above can do little more than indicate the very wide range of subjects discussed at the Conference. A full set of papers has been deposited in the R.I.B.A. Reference Library for those who would like more information. They serve to show not only that the science of social studies is necessary in a nation organised on modern communal lines, but that we have still a long way to go in meeting human needs and that there are subtleties that many of us have hitherto not realised.

The Conference was closed by three excellent summarising speeches by Professor T. H. Marshall, Mr. D. Caradog Jones and Mr. E. J. Carter.

The Organisation and Work of the R.I.B.A.

By A. L. ROBERTS [V.P.]

A talk given to the Central Chapter of the Hampshire and Isle of Wight Architectural Association on 26 January 1946. Mr. Roberts is Past-President of the Hampshire and Isle of Wight Architectural Association and is the present Chairman of the Allied Societies' Conference.

Twenty minutes was the time which this Chapter allotted for this talk. Nevertheless, I hope to give a rough sketch of the organisations and activities of two bodies which are very closely related to one another, and both very much the concern of all Allied Societies of the R.I.B.A. I refer, of course, to the Royal Institute of British Architects and to the Architects' Registration Council of the United Kingdom, usually referred to more conveniently as "A.R.C.U.K."

I shall have to restrict much of what I say to facts and figures, but I hope they will help to answer that irritating question which is sometimes asked by persons who are not in direct touch with the organisations I have mentioned, namely: "What does the R.I.B.A. do for its members?"

In the May 1935 number of the *Architectural Association Journal* there is a report of a talk similar to that which I am now giving, addressed to the A.A. by Sir Ian MacAlister. In his opening remarks he referred to the subject of the talk as "A large order for forty minutes." You will therefore understand that after a lapse of about 11 years, in which still greater progress has been made, it is now an impossible task to speak adequately of the Institute, and all it does for its members, in the shorter space of 20 minutes.

For this reason I wish to refer those who desire more detailed information than I have time to give to the report on Sir Ian's talk; also to the Centenary History of the R.I.B.A.; to pages 17 to 37 of the 1939-40 R.I.B.A. Kalendar, and to the R.I.B.A. Annual Report as published in the *JOURNAL* in the month of April each year, and which should, in the ordinary course, be read by every member of the Institute and its Allied Societies.

Numbers of Architects

The first important fact which I want to make clear in your minds is "How we stand in our profession in relation to other 'architectural' bodies." The Register of Registered Architects, which it is the duty of "A.R.C.U.K." to keep, now contains the names of approximately 15,000 Registered Architects. The Admission Committee still have about 390 applications for admission to the Register to report upon before they complete their work. Admission to the Register will then be by recognised examinations only.

If we analyse the 15,000 Registered Architects this is what we find:—

Members of the R.I.B.A.	8,240	}	9,310
Members of Allied Societies (R.I.B.A.) not being members of the R.I.B.A.	1,070		
Members of other organisations	1,800	}	5,690
Unattached	3,890		
Total	15,000		

Organisation of "A.R.C.U.K."

The representation of these respective bodies, and others, on the Council of "A.R.C.U.K." for the Session 1945-46, is shown in the attached table (right).

The Council is assisted by the following committees:—Admission; Discipline; Finance and General Purposes; Professional Purposes; and the Statutory Board of Architectural Education. All report to the Council which meets quarterly.

For the guidance of registered architects as well as the Discipline Committee the Council have recently adopted a new Code of Professional Conduct based upon the needs dictated by experience, plus consultation with the constituent bodies and framed in accordance with the advice of learned counsel. This new Code was finally approved by the Council at their meeting

on 14 December last. (*It has now been issued to all Architects on the Register.—ED.*)

Mr. Sydney Tatchell [F.] is the chairman of "A.R.C.U.K." and I feel I must pay a high tribute to him for his ability, patience, sense of justice and personal charm of manner which have endeared him to every member. I should also mention that the Registrar, Mr. Pembroke Wicks, C.B.E., LL.B., is a barrister of great ability, and he is assisted by a staff of ten persons working in premises adjoining the R.I.B.A.

R.I.B.A. Council and Committees

We can now give our attention to the R.I.B.A. Its Council comprises 72 members, including the President and 24 representatives of allied societies in Great Britain and Ireland, and it meets monthly.

It is assisted in its work by about 30 boards and committees and they have set up, with the approval of the Council, about 34 sub-committees to consider and report to them upon special parts of their work.

The number of architects taking part in these committee meetings is over 620, and in addition to this number there are about 40 persons, outside the ranks of the Institute, with special knowledge on certain subjects, who have been co-opted on to various committees and sub-committees. The work done by these committees and the persons on them is really colossal.

But the activities of the Council do not end here, for the Council make about 100 appointments of members to serve on committees outside the Institute, on invitations from the Government, other professional bodies and also trade organisations, so our interests in these quarters are most carefully watched and reported upon to our Council.

Council Hospitality

Then there is a much more personal contact with Ministers, important Members of Parliament, representatives of Allied Societies overseas, foreign architectural bodies and other distinguished persons who are frequently entertained at the Council Dinner Club, an organisation which is run and financed by past and present members of the Council.

TABLE

Members appointed by the R.I.B.A.	16	}	22
" " R.I.B.A. Allied Societies	2		
" " Royal Society of Ulster Architects	1	}	3
" " Architectural Association Inc. Association of Architects and Surveyors	3		
" " Faculty of Architects and Surveyors	3	}	16
" " Association of Building Technicians	2		
" " Unattached Architects	9	}	28
One member appointed by each of the following:—			
Ministry of Education; Ministry of Health; Commissioners of Works; Dept. of Health, Scotland; Governor, North Ireland; Chartered Surveyors' Institution; Society of Engineers; Institution of Structural Engineers; Institute of Municipal and County Engineers; Institute of Builders; National Federation Building Trades Employers; and the National Federation of Building Trades Operatives.	12	}	50
Total membership of Council	72		

In pre-war days dinners were provided after Council meetings and before the following general meeting in the evening. During the early part of the war the dinners had to be suspended, but later on luncheons were instituted in place of dinners; to these, members are able to invite personal guests, apart from official guests who are entertained by the President. In this way the members have had the privilege of lunching with important Cabinet Ministers who have afterwards been good enough to address the Council, informally, on their particular work, and have even allowed questions to be put to them afterwards for a short period. In this way we have had personal contact with such important men as the Minister of Works, the Minister of Health, the Minister of Education, the Minister of Town and Country Planning, and so on. Information most valuable to us has been obtained in this way.

Public Relations

The Registration Act gave us statutory recognition of "The Qualified Architect." It is the work of our Public Relations Committee at the R.I.B.A., aided by the Public Relations Committees of our Allied Societies, to see that the general public understand and appreciate architecture and recognise the architect and employ him in his proper place on all possible occasions. To this end a "White Paper" is coming to Allied Societies in the near future, and I am sure that success for this movement, which all of us must desire, will truly come, if the Allied Societies establish strong and active Public Relations Committees within their respective areas. The headquarters Committee also meets the present great demand for information, lectures, photographs and films on architectural subjects.

R.I.B.A. "Internal" Affairs

If we regard the work of these committees as "Exterior Relations" it only remains for our "Interior Relations"—within the ranks of our profession—to be successfully dealt with to cover the whole field, and this is to be provided through the R.I.B.A. JOURNAL in its new enlarged form which it is hoped to issue within the next twelve months. Mr. Eric L. Bird, M.C. [A.], the present able Public Relations Officer at the Institute, will be the editor of the new JOURNAL, and his present appointment as Public Relations Officer will be taken over by Mr. G. E. Marfell, B.A., who was in pre-war years the exhibitions secretary.

Mr. E. J. Carter, B.A., A.A. (Dipl.) [A.], whose work on the old JOURNAL we all appreciate, will then be able to devote the whole of his time to the work of the Library, and already he has set on foot great schemes for its extension and usefulness, which should when carried out give us the best possible home for our books and journals, which are believed to form the finest architectural collection in the world.

Professional Unity

It should be more generally recognised than it is that the R.I.B.A. as now organised is just as much the home of the salaried assistant, and official architect, as it is of the private practitioner. Had this been so in days gone by I doubt if we should have so many other architectural organisations which, unfortunately for us all, now prevent our Institute speaking "with one voice" for the profession as a whole. If unity had been secured in earlier days much more would have been achieved for the profession than has been possible in the circumstances. Nevertheless, it is still important that we should strive vigorously to reach that ultimate end.

The Salaried Architect

Now while I haven't time to refer to all the committees and their work individually, I want to point out that the salaried members, and the official architects, both have their own committees to deal with their own particular problems, and the former has quite recently got the Council to approve a recognised Scale of Salaries for all salaried members. The Council has also committed itself to the appointment of a "Negotiating Officer" whose duty it will be to examine the salaries received by all salaried members, and where necessary to approach their employers, on behalf of the Institute, as to adjustments necessary to conform with the agreed scale. Surely this measure alone is

one very substantial and convincing answer to the question "What does the Institute do for its members?" In any case it should satisfy the salaried class.

Some Other Services

But this is only one of many instances, and I should specially like to draw the attention of all Students to the prizes and scholarships offered by the Board of Architectural Education, and to the work of the Architectural Science Board whose lectures and papers they ought to follow closely and systematically. Also they should not overlook the facilities of the Library.

I would also remind private practitioners of the Code of Professional Practice; the Scale of Charges—accepted as equitable in courts of law; the Standard Forms of Contract, and the Competition Regulations which have been created and are maintained by the Institute for the benefit of its members.

The R.I.B.A. Staff

In conclusion I should like to say a few words about the salaried staff of the R.I.B.A. who have been wrestling with an almost impossible task in the late war years. I feel we were extremely fortunate in appointing Mr. C. D. Spragg to succeed Sir Ian MacAlister as secretary. Mr. Spragg has had the advantage of a long association with Sir Ian, and his retentive brain, coupled with a naturally happy manner of being tactful, is a great asset to the Institute. His second-in-command is Mr. Gerald Essame, O.B.E., B.A. It is too soon yet to speak of him from experience, but it is only fair to say that he has a charm of manner and has come to us with a great reputation, and the fact that his military services secured an O.B.E. for him in the last Honours List speak for itself and holds for us great promise for the future. He was selected out of more than 300 applicants, and it is to his credit and our advantage, I think, that he has been specially trained in business methods.

Everard Haynes, M.A., the Secretary to the Board of Architectural Education, to the Architectural Science Board and to the Statutory Board of Architectural Education of "A.R.C.U.K." is, I believe, known to many of you, and I say without hesitation he is a most able man at his job.

Edward J. Carter, B.A. (Cantab.) [A.], the Librarian; Eric L. Bird, M.C. [A.], the new editor of the JOURNAL; and G. E. Marfell, B.A. Oxon., the new Public Relations Officer, I have previously referred to, and I can assure you they are all held in the highest esteem for their great ability.

The Negotiating Officer still has to be appointed. There are other numerous persons on the salaried staff under Mr. Spragg who ought to be mentioned to complete the list, but I must content myself by saying there are no less than 45 of them in all, and leave it at that.

The Honorary Officers

In addition to the salaried staff there are a number of honorary officers such as the Hon. Secretary and the Hon. Treasurer, who do a great job of work, and here one ought to mention that the President's task involves an immense amount of time and tact. He is assisted in his work, as circumstances necessitate, by four vice-presidents, and at times they are kept very busy.

Finally I should like to say a few words about "The Finance and House Committee," of which the hon. treasurer—at present John L. Denman [F.]—is its able and trusted chairman. It is with considerable pride that I tell you I am his vice-chairman. The greatness of the responsibility for the work of this committee is, I think, sufficiently indicated by reference to our Ordinary Funds Income which in 1944—the latest published figures available—amounted to £45,387.

The amount invested in trust funds for the purpose of prizes and scholarships in the award of the R.I.B.A. is over £80,800.

I am conscious that in this very brief review I have been obliged to omit reference to much I should have liked to speak about had time permitted, but I hope I have sufficiently covered the ground to prevent any member present from repeating the question: "What does the R.I.B.A. do for its members?" or, alternatively, referring to this allied society: "Is it any earthly use belonging to this Association?"

Ministry of Works Standard Hutting for Schools

The Executive Committee has directed that the following Report by the Committee on School Design and Construction should be forwarded to the Minister of Education and published in the JOURNAL. The Report embodies the views of the Royal Institute on the recent proposal of the Ministry to use M.O.W. standard huts for the additional school accommodation required by the raising of the school-leaving age.

The Committee was first appointed in February 1945 to consider and report on the subject of school design and construction. The report of the Committee was submitted to the Council and approved by them on 19 June 1945, and was published in the R.I.B.A. JOURNAL for August 1945. The report has been issued in pamphlet form and copies have been sent to all Local Education Authorities in England, Scotland, Wales and Northern Ireland.

The Council decided to appoint the Committee as a permanent one to advise on matters concerning school design and construction and the question of the use of M.O.W. standard hutting for school buildings was at once referred to the Committee for consideration and report.

The Committee consists of the following members:—

- Mr. C. G. Stillman, F.R.I.B.A. (Chairman), County Architect, Middlesex.
- Mr. Verner O. Rees, F.R.I.B.A. (Vice-Chairman).
- Mr. Julian Leathart, F.R.I.B.A. (Hon. Secretary).
- Mr. W. T. Benslyn, A.R.C.A., F.R.I.B.A., Architect to the Birmingham Education Committee.
- Mr. P. W. Birkett, A.R.I.B.A., County Architect, County of Lincoln—Parts of Lindsey.
- Mr. A. C. Bunch, F.R.I.B.A., late County Architect, Warwickshire.
- Mr. D. E. E. Gibson, A.R.I.B.A., A.M.T.P.I., City Architect, Coventry.
- Mr. J. Harrison, F.R.I.B.A., County Architect, Surrey.
- Mr. O. P. Milne, F.R.I.B.A.
- Mr. John Swarbrick, F.R.I.B.A.
- Mr. S. E. Urwin, F.R.I.B.A., County Architect, Gloucestershire.
- Mr. E. Barry Webber, A.R.I.B.A.

There are aspects of recent Ministerial directions to local education authorities concerning the proposed M.O.W. temporary hutting programme for school building, which give rise to misgivings regarding the "strictly temporary character" of these buildings, to quote from para. 5 (iii) of the M.O.E. Circular No. 98. No such definite reference to the projected life of the huts is made in the M.O.E. Circular No. 64 wherein the word "temporary" does not occur. Less definite still is the advice to local authorities contained in Circular No. 19 issued by the Ministry of Town and Country Planning to disregard time-limits of usability in formulating their standard hutting requirements. The scope and urgency of the school accommodation programme, however, provides the most cogent evidence of the inevitability of a long-term policy of "temporary" building to overcome the difficulties of the task ahead.

The decision to terminate the Compulsory School Age (Postponement) Order on 1 April 1947 is the primary cause of the imposition of sub-standard building expedients upon the local authorities, but this is not the whole of the additional accommodation problem. In the M.O.E. Circular No. 98 the fact is emphasised that the new accommodation to be provided by August 1948 covers only that required in connection with the raising of the school-leaving age. It "does not apply to the provision of accommodation for the purpose of relieving overcrowding or the reduction of the size of classes."

It is probable, therefore, that a further instalment of substitute buildings to eliminate overcrowding and to reduce class sizes, would follow upon the present three-year-plan; but the Government may not be content to wait upon the completion of the first part of its rebuilding programme before it issues directions for further standard huts to be built to meet the second

contingency of overcrowding. Thus it may be that towards the end of the three-year term, the further programme would be running concurrently with the first. These two phases of expansion would constitute a building venture of very considerable magnitude involving the erection of thousands of standard hut the extent of which must, perforce, be spread over a much longer time than that suggested in the M.O.E. directives. As a result, a large percentage of the child population of this country for many years to come, will be compelled to receive its education in new structures of a sub-standard, improvised character which were originally designed for war-time, army-hutting purposes. Further, there will be little or no possibility of implementing the provisions of the 1944 Education Act relating to improved standards of accommodation and quality of buildings and equipment within a measurable distance of time.

The Committee's criticisms on the M.O.W. standard hutting are made under the following headings:—

1. Design.
2. (a) Construction.
- (b) Heating.
- (c) Lighting.
- (d) Ventilation.
3. Siting of Huts.
4. Erection and demolition costs.
5. Maintenance Costs.
6. Delays in Procedure.
7. Recommendations.

The Committee make three recommendations which in their view would go towards the solution of the problem of providing the additional accommodation required as a result of the raising of the school-leaving age instead of the undesirable temporary solution proposed by the Ministry of Education.

1. Design

The design is not suited to school use; access corridors do not form part of the standard units and must be added by improvised methods of construction. No provision is made for supporting the back of the corridor roofs abutting the main structure. The eaves level is only 7 ft. 6 in. above the floor level and the window area is thereby restricted. (Normal school building standards require the top glass line to be at least 10 ft. 6 in. from the floor.) The three-light, standard metal casements to be supplied with the hutting units are 4 ft. 10½ in. wide and are narrower by 12 inches or more than the spacing between the posts; this will necessitate narrow widths of walling on one or both sides of each casement to fill out the opening. The now discarded timber casements filled the spacing between posts and were superior in this one respect. The improvised character of the hutting design is in no way better illustrated than in the foregoing example. As important as adequate natural lighting is to teaching rooms, no attempt has been made to provide *special casements of a school type* which would extend for the whole width of the inter-post spacings, and so utilise, to the maximum extent, the already too scanty lighting areas.

2. (a) Construction

The portal framework is adequate; in fact, it is too adequate for the supposed temporary nature of the building. Its life, with ordinary maintenance care, can be regarded as of a 20 to 25 year duration. Infilling walling is of 4 in. hollow blocks "externally waterproofed"—method unspecified. 4½ in. brick-

work is to be substituted where hollow blocks are unobtainable. Such filling cannot be regarded as being adequate either from moisture penetration and condensation or thermal insulation aspects. Compared with accepted standards, the insulation values of 11 in. cavity wall and tiled and felted roof construction are low; it is therefore obvious that 4 in. clay block or half-brick walls and asbestos sheet roofing will be less capable of resisting excessive heat-losses. Except for the portal framework, the general construction is inadequate and is more appropriate to a storage-shed building than to a school.

(b) Heating

Slow combustion stoves of the type supplied by the M.O.W. for standard hutting are small and will provide inadequate heating. Heat distribution by means of stoves is unequal; there is too much near the heat-source and insufficient in remote parts of the room. Stove heating is dusty and draught-creating and it has the further objection that fluctuations in room temperatures follow from irregular stoking.

Central heating, where permitted by the provision of new sanitary accommodation in huts, will be more than usually costly to install because of the need for greater heating surfaces than normally required in order to overcome excessive heat-losses through the thin-membrane roof and walling infillings. Boiler capacities, pipe sizes and fuel consumption will be increased thereby.

(c) Lighting

Owing to daylight reaching the desks from the low altitude of 7 ft. 3½ in. from floor to the top glass line of the casements, much of it received in theory will, in practice, be intercepted by the heads and bodies of the pupils. It is probable that in many cases, the external obstruction will exceed 15 degs. in altitude. From calculations of the daylight factors made for an 18 ft. 6 in. wide hut without a corridor and with windows on both sides, the highest percentage obtainable for any working position is 2.12; the average on the whole room is only 1.8 per cent. In a similar room with a corridor on one side and the light source confined to windows on the opposite side only, the highest percentage is 1.55 and the average is 1.25 per cent. In the wider 24 ft. huts the daylight factor percentages will be lower still. The Lighting Committee of the D.S.I.R. in "Post-War Building Studies No. 12" suggests that for single storey buildings, a minimum daylight factor of 5 per cent. is desirable for classrooms in new schools and that 10 per cent. is a suitable intensity for rooms in which drawing, sewing and machining are taught. Comparing these figures with those quoted above, it will be seen that the lighting to the teaching rooms in the standard huts falls *very much below* recognised minimum standards. As the incidence of defective eyesight in children increases throughout the period of school life, too great stress cannot be laid upon the extreme inadequacy of the natural lighting provided and to the consequent menace to the vision of those children who will spend their school lives in the M.O.W. huts. As unsuitable as these buildings are for schools from almost every general aspect, they should stand condemned on this particular alone.

(d) Ventilation

Standard metal casements do not open in such a manner as to make it possible to maintain ventilation during high winds or rain. The side-hung casements will only function as ventilators under conditions of calm, dry weather. One small, top-hung night ventilator is the only part of each casement available for opening under all weather conditions. Roof ventilators, as suggested in the M.O.E. Circular No. 98, will, if installed, create down-draughts. Because of the low thermal insulation value of walls and roof, it is questionable whether the occupants of the class-room will be able to tolerate open windows on a winter's day, and during the hot summer days, the penetration of heat through uninsulated walls and roof will cause extreme physical discomfort.

3. Siting of Huts

The M.O.E. contemplate that the new huts "will generally be erected on the playgrounds of schools." Siting exceptions to

this ruling must obtain the prior approval of H.M. Inspectors. Not all existing playgrounds conform to the M.O.E.'s regulations in regard to area, especially in Town Schools. To reduce, by new buildings, already inadequate play and drill space may compel the educational authorities to acquire and prepare new playgrounds to compensate for the loss. Further, it will be difficult, if not impossible, in many cases to site the huts on playgrounds where they will not interfere with the permanent extensions required at a later date under the 1944 Act.

Inconvenience and unnecessary expenditure will ensue from either of the foregoing circumstances.

4. Erection and Demolition Costs

In comparing the erection costs of (A) the M.O.W. standard huts with those for (B) a building of a permanent character designed as a school it should be emphasised that the cost of (B) saves the whole of the cost of (A) since it will not have to be rebuilt at a later date, and that the expenditure on (A) is for a substandard and unsuitable building. Very little capital outlay is saved in initial costs compared with the simply designed, permanent building and as the salvage value of the huts is negligible, the M.O.E.'s proposals will incur wasteful expenditure of public funds. Further, the shorter the tenure of occupational usefulness, the greater the relative waste of money.

The Committee has been able to analyse the comparative cost of a new permanent school building now being erected in Hertfordshire, with M.O.W. Standard hutting of equivalent floor area. The permanent building consists of steel stanchions and roof trusses at 12 ft. centres with external 11 in. cavity brick walls, R.P.M. roofing and flat, fibre-board ceilings. The rooms are 11 ft. from floor to ceiling, and the class-room windows fill the bays between the stanchions. The M.O.W. hut is standard in every respect except that in this case 11 in. brick cavity external walls have been substituted for the usual 4 in. clay block or 4½ in. brick. The comparable total man-hours of normal site-building labour are: For the permanent building 4,057. For M.O.W. standard hutting 3,972. To the total of 4,057 man-hours for the permanent building must be added 667 man-hours expended in steelwork erection by specialist sub-contractors, which labour is not normally employed on house-building. Beyond the question of relative man-hour expenditure on site work (and the figures disclose that the difference is insignificant in regard to normal site operations) there are no further grounds for comparison. The permanent building is superior in every particular; the planning conforms to the standards of quality prescribed in the 1944 Education Act, the building is of good appearance and its maintenance costs are low. The conclusion to be drawn from the foregoing analysis of cost is that the M.O.W. hutted school is comparatively more costly since it provides sub-standard accommodation and must be written off as a total loss at the end of its term of usefulness.

5. Maintenance Costs

It is inevitable in sub-standard building that maintenance costs must be higher than for good quality, permanent building, and experience with war-time temporary hutting gives ample proof of this. It has not been made clear by the M.O.E. that maintenance costs will fall upon the local authorities and the question of demolition and removal costs has not been clarified. As the thin external walls cannot be moisture-resisting, considerable periodic maintenance work will be required in the attempt to keep them dry.

6. Delays in Procedure

From the investigations the Committee has made into administrative procedure with regard to the supply of standard hutting parts, it is clear that the Government's system of delivery is not working with smoothness nor precision. Taking a representative cross-section of local authorities' requirements for huts in the school canteen scheme, it was found that there is no systematic delivery of parts, that parts arrive broken or are lost in transit, that there are often serious departmental delays in allocating huts after application has been made and that time and money are wasted by contractors on the sites whilst awaiting delivery of vital missing items of construction. The increase in site

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expenditure of man-hours caused by the faulty working of the scheme is never disclosed officially, but if figures could be made available it is probable that the advantages claimed of speed and economy in site labour for prefabricated hutting would be substantially negated by the results.

7. Recommendations

The Committee recommend the following alternatives to the M.O.W. standard hutting scheme for the consideration of the Ministry of Education :—

(a) Where additional accommodation is required as part of permanent school reorganisation under the raising of the school-leaving age scheme, every encouragement should be given to local authorities to build additional accommodation in permanent construction with local materials as an instalment of the ultimate and permanent building.

(b) When additional accommodation is clearly of a temporary nature, it should be provided, in a large measure, by specially designed, transportable huts which will be of considerable salvage value to the local authority at the end of their term of usefulness. Transportable huts are capable of easy removal to new positions if found to be obstructive to siting of the permanent extensions; there is less likelihood of their becoming permanencies as happened to much of the "temporary" hutting erected after 1918; it is possible to move them and erect permanent accommodation on their foundations if they are sited in proper positions for the purpose (the foundations of the standard hut must be largely destroyed in removing the portal frames).

(c) M.O.W. standard hutting should be used only in extreme emergency and should be confined solely to the initial stages of the programme whilst arrangements under (a) and (b) are being put into effect.

NOTES FROM THE MINUTES OF THE COUNCIL MEETING 15 JANUARY 1946

New Year Honours

The Council enthusiastically congratulated the President on the honour of knighthood conferred upon him and the cordial congratulations of the Council have been conveyed to other members included in the Honours List and to other recipients closely associated with the architectural profession and building industry. (The list was published in the January JOURNAL).

Appointments

Codes of Practice Committee for Civil Engineering, Public Works Building and Constructional Work : Mr. Stanley Heaps [F.].

B.I.N.C. Conference of Associated Bodies : Mr. J. L. Denman (Hon. Treasurer), Mr. Michael Waterhouse (Hon. Secretary).

Ministry of Health Conference on Model Bye-laws (Series XXI) for prevention of waste, etc., of water : Mr. Digby L. Solomon [F.].

Ministry of Fuel and Power : Representatives to discuss with the Fuel Efficiency Committee the subject of Thermal Insulation in Buildings : Mr. G. Grenfell Baines [A.], Mr. A. M. Chitty [F.], Mr. George Fairweather [F.], Mr. P. V. Mauger [F.], Mr. Guy North [F.].

Public Relations Committee (additional members) : Mr. A. F. B. Anderson [F.], Mr. R. Henniker [A.], Mr. R. F. Jordan [F.], Miss J. Ladeboer [A.], Mr. Frank Scarlett [F.], Mr. Norman Westwood [F.].

Lectures Sub-Committee (additional members) : Mr. Arthur Ling [A.], Mr. Richard Sheppard [F.], Mr. Cecil Stewart [A.], Mr. P. Warre Cornish [A.].

Permanent Exhibition Sub-Committee : Mr. H. V. Lobb [F.] (Chairman), Mr. R. F. Jordan [F.], Mr. Norman Westwood [F.], Mr. G. Grenfell Baines [A.].

Annual General Meeting 1946

The Lord President of the Council has sanctioned the holding of the Annual General Meeting on Tuesday, 7 May.

Postponement of Military Service for Architects' Pupils and Apprentices

Correspondence with the Ministry of Labour and National Service on this matter has been referred to the Schools Committee of the Board of Architectural Education for consideration.

District Heating

The Ministry of Works have been asked for information as to the steps being taken to investigate the subject of district heating.

Licences for Small Houses and Inclusion of Architects' Fees

The Ministry of Health have been urged to give further consideration to the present position which is that the architect's fees must be included in the selling price of a house built for sale but not in the contract price of a house built for the owner's occupation.

Visit of Mr. Lewis Mumford (Hon. A.) to England

In connection with the visit of Mr. Lewis Mumford to England, which is being arranged by the Institute of Sociology, the Public Relations Committee have been asked to arrange a meeting at the R.I.B.A. to be addressed by Mr. Mumford.

Revision of the Scale of Professional Charges

The Council confirmed their decision taken on 16 October to amend

Clause 7 of the Scale of Professional Charges and the Clause now reads as follows :—

7. Time Charges.

In cases in which charges are based upon time occupied the minimum fee is seven guineas per day exclusive of charges for Assistant's time.

Membership

The following members were elected :—

As Fellows 8; as Associates 51; as Licentiates 12.

Election 12 March

Applications for election were approved as follows :—

As Hon. Fellow 1; as Fellows 13; as Associates 4; as Licentiates 22.

Election 25 June

Applications from overseas candidates were approved as follows :—

As Fellows 3; as Associates 3.

Applications for Reinstatement

The following applications for reinstatement were approved :—

As Fellows : Horace Bernton-Benjamin, Alfred Rowland Conder, Kenneth Hamlyn McConnel.

As Associates : Frederick Walker Harper, John Horner Hargreaves, Gordon Hemm, Robert Gillespie Meldrum, Harry Arnold Rowbotham, John Bernard Shaw, Llewellyn Edwin Williams.

As Licentiate : Spender Lewis Palmer.

Resignations

The following resignations were accepted with regret :—

Alfred Renwick Rason [F.].

Sydney Herbert Rainforth [A.].

Henry Bartholomew Tunnard [A.].

Douglas Gordon Denoon (Subscriber).

Retired Members

The following applications for transfer to the Retired Members' Class under Bye-law 15 were approved :—

As Retired Fellow : Francis John Humphry.

As Retired Associates : Percy May, Harold Watts.

As Retired Licentiates : Charles Ingleby Greenhow, Francis Coleman Higgins, Arnold Woodrow Kyle.

Obituary

The Secretary reported with regret the death of the following Hon.

Members, Members and Student :—

Lord Lang of Lambeth, D.D. [Hon. F.].

Professor John William Mackail, O.M. [Hon. A.].

de Lacy Aberne [F.].

Frederic Wykeham Chancellor [F.].

Henry Elwig [F.].

Frederick George Faunch [F.].

Mowbray Aston Green [F.].

Percy John Groom [F.].

Frederick Ernest Pearce Edwards, F.S.A. [Retd. F.].

Walter Edward George Coker [A.].

Tom Simpson [A.].

Francis Burdett Ward [L.].

George Ware [L.].

Thomas John Taylor Hill [Student.]. Killed on active service.

WAR DAMAGE REPAIRS

Code of Professional Fees

The first scale of professional fees allowed by the War Damage Commission for acting in an advisory or supervisory capacity in connection with the execution of war damage repairs was issued in September, 1941. This was superseded by a revised scale issued in March, 1942. This revised scale which was in some degree an improvement on the original scale was never regarded by the professional institutions as satisfactory in several respects. When R.O.D. 1 was issued by the War Damage Commission in June, 1944, it was felt that the necessity of complying with the requirements of the Commission as set out in this document would impose an additional burden on the professional adviser and that the time was opportune for a review of the whole position.

The matter was referred to a Joint Committee of representatives of the R.I.B.A. and Chartered Surveyors' Institution, and proposals for the revision of the scale were drawn up for submission to the Commission. With the authority of the Councils of the two institutions the proposed revised scale was sent to the Commission in January, 1945, with the request that an interview should be accorded in order that the reasons for the proposed alterations should be explained. The revised scale put forward by the R.I.B.A. and the Chartered Surveyors' Institution is set out below and is shown in comparison with the scale issued in March, 1942, by the War Damage Commission.

WAR DAMAGE COMMISSION SCALE MARCH 1942

1. For making, when necessary, detailed survey of the building if no drawings are available, or checking the drawings if available :—

Principal's time	£5 5s. od. a day
Senior Assistant's time	£2 12s. 6d. a day
Junior Assistant's time	£1 11s. 6d. a day

Note.—Senior assistants to mean assistants receiving £6 6s. a week and upwards ; junior assistants those receiving up to £6 6s. a week.

2. (a) For preparing working drawings and specifications of the works (or equivalent document) ; where necessary, obtaining tenders and/or arranging a contract ; for general supervision of the execution of the works and certifying for payments and completion :—

- 10 per cent. on works costing up to £500, with a minimum fee of £10 10s. ;
- 9 per cent. on works costing between £500 and £1,000, with a minimum fee of £50 ;
- 8 per cent. on works costing between £1,000 and £1,500, with a minimum fee of £90 ;
- 7 per cent. on works costing between £1,500 and £2,000, with a minimum fee of £120 ;
- 6 per cent. on works costing over £2,000, with a minimum fee of £140.

(b) For preparing a specification of works (or equivalent document) ; for obtaining tenders and/or arranging a contract, where necessary ; for general supervision and execution of the works and certifying for payments and completion :

- 5 per cent. on the first £500 of the cost with a minimum fee of £1 1s. (or a minimum fee of £5 5s. where the work affects the structural stability of the building or involves reinstatement or repair of features of architectural or artistic interest) ;
- 4½ per cent. on the next £500 of the cost ;
- 4 per cent. on the next £500 of the cost ;
- 3½ per cent. on the balance of the cost.

3. The above fees are exclusive of travelling expenses and other reasonable disbursements and the fees under (1) are, in addition, to those under (2).

4. The above fees are exclusive of the wages of a clerk of works.

5. The above fees are exclusive of those for quantity surveying services. If such services are required, fees will be allowed, in addition, on the normal professional scale.

SCALE PROPOSED BY THE R.I.B.A. AND THE C.S.I. JANUARY 1945

1. For making, when necessary, preliminary survey for the purpose of consultation with the War Damage Commission as laid down in R.O.D. 1, and/or detailed survey of the building if no drawings are available, and/or checking drawings if available, and/or substantial advisory work :—

Principal's time	£8 8s. od. a day
Senior Assistant's time	£4 4s. od. a day
Junior Assistant's time	£3 3s. od. a day

Note.—Senior assistants to mean assistants receiving £7 7s. a week and upwards ; junior assistants those receiving up to £7 7s. a week.

2. (a) For preparing working drawings and specifications of the works (or equivalent document) ; where necessary obtaining tenders and/or arranging a contract ; for general supervision of the execution of the works and certifying for payments and completion :—

- 15 per cent. on works costing up to £500, with a minimum fee of £15 15s. ;
- 12 per cent. on works costing over £500 and up to £1,000, with a minimum fee of £75 ;
- 10 per cent. on works costing over £1,000 and up to £1,500, with a minimum fee of £120 ;
- 8 per cent. on works costing over £1,500 and up to £2,000, with a minimum fee of £150 ;
- 6 per cent. on works costing over £2,000, with a minimum fee of £160.

(b) For preparing a specification of works (or equivalent document) ; for obtaining tenders and/or arranging a contract, where necessary ; for general supervision and execution of the works and certifying for payments and completion :—

- 7½ per cent. on works costing up to £1,000, with a minimum fee of £1 1s. (or a minimum fee of £5 5s. where the work affects the structural stability of the building or involves reinstatement or repair of features of architectural or artistic interest) ;
- 5 per cent. on works costing over £1,000, with a minimum fee of £75. (The Commission to be asked to define "structural stability".)

3. The above fees are exclusive of travelling expenses and other reasonable disbursements and the fees under (1) are in addition to those under (2).

4. The above fees are exclusive of the wages of a clerk of works, which will be recoverable from the War Damage Commission.

5. The above fees are exclusive of those for quantity surveying services. If such services are required, fees will be allowed in addition on the normal professional scale. In the case of prime cost contracts the checking of contractors' accounts will be considered as a quantity surveying service and fees for that service will be allowed in addition on the scale agreed between the War Damage Commission and Chartered Surveyors' Institution.

6. The above fees are inclusive of the fees of any consultant or specialist engineer by whom the architect or surveyor may wish to be advised.

7. Where repairs are carried out to several properties in the same area and in the same ownership, the scale of fees may be applied by reference to the aggregate cost of the work, provided that the premises are in the same vicinity, that the same builder carries out the work, and that all the work is done at the same time.

Circumstances under which Fees can be allowed

1. It is a condition of the allowance of fees that an appropriate specification or equivalent document conveying to the builder clear directions as to the work to be carried out is prepared before or at the time when the works are put in hand, and that the person charging the fees certifies that he has fully performed the services described under the appropriate heading or headings of the scale.

2. Fees for quantity surveying services will be allowed where the works cost more than £1,000, and where these services are rendered by a quantity surveyor or a firm of quantity surveyors practising as such, not being the person or firm rendering the services described in paragraphs 2 (a) or 2 (b) of the scale above.

Provided only that where the person or firm who has rendered the services described in paragraphs 2 (a) or 2 (b) of the scale above in the capacity of registered architect is also in regular practice as quantity surveyor, fees for quantity surveying services may also be allowed where the certificate that these latter services have been performed is signed by the person (stating his qualifications) who has actually rendered such services, and also by the principal or firm with which he is connected.

3. Pending further discussion with the professional institutions concerned the Commission has decided that the scale will only apply to works costing less than £50,000.

4. The scale is not applicable to cases where, owing to the special nature of the work, the accepted practice would be for the work to be carried out under the direct supervision of an engineer (e.g., work on public utility undertakings such as gas and water services).

NEGOTIATIONS WITH THE WAR DAMAGE COMMISSION

In the discussions which took place with the representatives of the War Damage Commission, the R.I.B.A. and the Chartered Surveyors' Institution were joined by representatives of the Auctioneers' and Estate Agents' Institute, who were in agreement with the recommendations put forward for the revision of the scale.

Efforts were made to induce the Commission to allow the costs incurred in connection with party walls and the work involved in applications for licences, etc.; and in connection with the employment of consultants the Commission were urged—as shown in the amended scale above—to comply with the usual R.I.B.A. practice and scale, but the Commission maintained that they had no power under the War Damage Act to allow for these items.

The result of the negotiations with the Commission is the revised Code now issued by the Commission which is shown as an appendix to this memorandum. It is a matter of considerable regret that a greater measure of success has not attended the efforts of the representatives of the three institutions, and it is felt that as members are entitled to know what has transpired, the following correspondence which ensued from thirteen months' negotiations is published for their information:—

22 January 1946

Dear Mr. Woods,

Revision of the Code of Professional Fees allowed by the War Damage Commission.

At the meeting held on 28 November between representatives of the War Damage Commission and representatives of the R.I.B.A., the Chartered Surveyors' Institution and the Auctioneers' and Estate

6. Where it is agreed by the War Damage Commission that the services of a consultant shall be retained in no case shall the architect's fee be reduced by more than 2 per cent. on the cost of the work upon which the services of the consultant are retained, provided always that the architect's fees on the cost of the whole scheme shall not be reduced by more than 1 per cent.

7. Where repairs are carried out to several properties in the same area and in the same ownership, the scale of fees may be applied by reference to the aggregate cost of the work provided that the premises are in the same vicinity, that the same builder carries out the work and that all the work is done at the same time. As far as is practicable an aggregate specification will be accepted by the Commission.

Circumstances under which Fees can be allowed

1. It is a condition of the allowance of fees that an appropriate specification or equivalent document conveying to the builder clear directions as to the work to be carried out is prepared before or at the time when the works are put in hand, and that the person charging the fees certifies that he has fully performed the services described under the appropriate heading or headings of the scale.

2. Fees for quantity surveying services will be allowed on all prime cost contracts, on all lump sum contracts of over £1,000 and on lump sum contracts of under £1,000 where the prior approval of the Commission has been obtained, and where these services are rendered by a quantity surveyor or a firm of quantity surveyors practising as such, not being the person or firm rendering the services described in paragraphs 2 (a) or 2 (b) of the scale above.

Provided only that where the person or firm who has rendered the services described in paragraphs 2 (a) or 2 (b) of the scale above in the capacity of registered architect is also in regular practice as quantity surveyor, fees for quantity surveying services may also be allowed where the certificate that these latter services have been performed is signed by the person (stating his qualifications) who has actually rendered such services, and also by the principal or firm with which he is connected.

3. (No comment.)

4. The scale is not applicable to cases where, owing to the special nature of the work, the accepted practice would be for the work to be carried out under the direct supervision of an engineer (e.g., work on public utility undertakings such as gas and water services).

Agents' Institute you asked that a formal letter should be sent to the Commission for consideration at the meeting to be held on the 14 December.

This being so, it is perhaps desirable to recapitulate very briefly the history of the negotiations which have been taking place since January last.

In the first place, without wishing to go over controversial ground again, I am asked to point out that there was no question of agreement being given by the R.I.B.A. to the remuneration set out in the Code of Professional Fees as issued in September 1941 and revised in March 1942. The R.I.B.A., together with the Chartered Surveyors' Institution and the Auctioneers' and Estate Agents' Institute, was consulted on the drafting of the Code. The R.I.B.A. acquiesced in the wording by the Commission, but as I have said there was no formal agreement on the part of the R.I.B.A. as we felt then, as we have felt since, that there were certain features which were definitely unsatisfactory.

We certainly looked upon it as subject to revision in the light of actual experience. We did in fact receive and are still receiving many complaints as to its inadequacy and when R.O.D.1 was issued consultation took place with the Chartered Surveyors' Institution and the Auctioneers' and Estate Agents' Institute with the result that proposals for the revision of the Code were formulated for submission to the Commission and these were sent to you on 11 January, 1945. Meetings then took place with you and other representatives of the Commission, culminating in the letter from the Commission dated 13 March rejecting our proposals *in toto*. This decision appeared to be based on a misunderstanding on the part of the Commission, and as a result of further correspondence the negotiations were resumed.

The position now appears to be as follows :—

- (a) The Commission are willing to adopt the same rates as the Ministry of Health and to increase the time charges set out in Clause 1 to read as follows :—

Principal's time	£7 7s. od. a day.
Senior Assistant's time	£3 13s. 6d. a day.
Junior Assistant's time	£2 12s. 6d. a day.
Senior assistants to mean assistants receiving £8 8s. od. a week and upwards; junior assistants those receiving up to £8 8s. od. a week.	

- (b) The Commission agree to omit that part of the scale under para. 2 (a) relating to work costing up to £500, and to insert a new paragraph under "Circumstances in which fees can be allowed" to read as follows :—

(4) The scale of fees under 2 (a) is not applicable in cases where the works cost less than £500. But where in exceptional cases the Commission agree that working drawings are essential to the work, fees under (1) will be paid, in addition to those under 2 (b), in respect of the preparation of the working drawings and of any necessary survey in connection therewith.

- (c) The following words to be added at the end of para. 4 :—
"which will be recoverable from the War Damage Commission provided that the employment of a Clerk of Works is reasonable."

- (d) The following words to be added at the end of para. 7 :—
"As far as practicable an aggregate specification will be accepted by the Commission."

- (e) The figure £100,000 to be substituted for £50,000 in the appropriate paragraph under "Circumstances under which fees can be allowed."

I am requested to state that the representatives of the professional institutions gladly agree to these revisions and trust that they will be confirmed at the next meeting of the Commission.

It is a matter of considerable regret, however, that the representatives of the Commission have so far been unable to go further towards meeting the other proposals for the revision of the Code submitted by the institutions, and they would ask that further and sympathetic consideration be given to these by the Commission.

But if unfortunately the Commission do not feel able to depart from their attitude as expressed at the meeting on 28 November, of declining to consider revisions to the main scales which had been proposed by the institutions, we would ask that a formal letter be written to the institutions setting forth the Commission's reasons, so that the position can be reported to our Councils and for publication if they so desire.

Yours sincerely,

C. D. SPRAGG,
Secretary.

A. J. D. Woods, Esq.,
War Damage Commission.

Commission's reference 225/16

War Damage Commission,
Piccadilly, W.1.
31 January 1946.

Dear Mr. Spragg,

Revision of Code of Professional Fees.

The Commission have considered the question of the revision of the Code of Professional Fees and note that the three Institutions agree to the revisions set out in (a) to (e) of your letter of 22 January 1946. I can now confirm that the scale of fees will be amended accordingly, subject to provision being made in paragraph 2 (b) of the scale for the fee to be calculated at 2½ per cent. on the balance of the cost between £50,000 and £100,000.

In addition, the Commission, as was indicated in the course of the discussions, have decided to make an increase in the scale under paragraph 2 (b) to provide for fees at the rate of 6 per cent. for works costing up to £500 and 5 per cent. for works costing between £500 and £1,000. I enclose with this letter a copy of the public notice which it is proposed to issue.

Your letter also asked that further consideration be given to the other proposals submitted by the Institutions for the revision of the scale. So far as the third paragraph of your letter is concerned, the existing scale was only settled after full discussion and the Commission have no doubt whatever that in their mind they were not adopting a merely experimental scale but fixing a scale which should only be altered if a change of circumstances justified alteration. They were under the impression that this was the view held by all the professional institutions and they regret to learn that the Royal Institute of British Architects did not in fact share this view.

In view of the representations made by the Institutions, however, the Commission have very carefully considered all the circumstances which

have arisen since the date on which the existing scale was fixed and they are bound to draw attention to the fact that during this period a very considerable increase in building costs has occurred with a corresponding increase in the amount of the professional fees payable. The Commission do not therefore feel that they would be justified in accepting the substantial increases suggested by the Institutions or in agreeing at the present time to revisions in the Code of Professional Fees beyond those indicated in the enclosure to this letter.

Yours sincerely,

(Signed) A. J. D. Woods.

C. D. Spragg, Esq.,

Royal Institute of British Architects.

APPENDIX

*War Damage Repairs
Revised Code of Professional Fees*

The War Damage Commission announces that the official notice of 2 March 1942 setting out the scale of professional fees for acting in an advisory or supervisory capacity in connection with the execution of the works which will be allowed by the Commission in claims for the cost of works or temporary works has been withdrawn and will be replaced by the following :—

Scale of fees

1. For making, when necessary, detailed survey of the building if no drawings are available, or checking the drawings if available :—

Principal's time	£7 7s. od. a day.
Senior Assistant's time	£3 13s. 6d. a day.
Junior Assistant's time	£2 12s. 6d. a day.

NOTE.—Senior assistants to mean assistants receiving £8 8s. a week and upwards; junior assistants, those receiving up to £8 8s. a week.

2. (a) For preparing working drawings and specifications of the works (or equivalent document); where necessary, obtaining tenders and/or arranging a contract; for general supervision of the execution of the works and certifying for payments and completion :—

9 per cent. on works costing between £500 and £1,000 with a minimum fee of £50.

8 per cent. on works costing between £1,000 and £1,500 with a minimum fee of £90.

7 per cent. on works costing between £1,500 and £2,000 with a minimum fee of £120.

6 per cent. on works costing over £2,000 with a minimum fee of £140.

- (b) For preparing a specification of works (or equivalent document); for obtaining tenders and/or arranging a contract, where necessary; for general supervision of the execution of the works and certifying for payments and completion :—

(i) *Works costing up to £500.*

6 per cent. on the cost, with a minimum fee of £1 1s. (or a minimum fee of £5 5s. where the work affects the structural stability of the building or involves reinstatement or repair of features of architectural or artistic interest).

(ii) *Works costing more than £500 but not more than £1,000.*

5 per cent. on the cost, with a minimum fee of £30.

(iii) *Works costing over £1,000.*

5 per cent. on the first £500 of the cost.

4½ per cent. on the next £500 of the cost.

4 per cent. on the next £500 of the cost.

3½ per cent. on the next £48,500 of the cost.

2½ per cent. on the balance of the cost over £50,000.

With a minimum fee of £50.

3. The above fees are exclusive of travelling expenses and other reasonable disbursements, and the fees under (1) are in addition to those under (2) (a).

4. The scale of fees under 2 (a) is not applicable in cases where the works cost less than £500. But where in exceptional cases the Commission agrees that working drawings are essential to the work, fees under (1) will be paid in addition to those under 2 (b), in respect of the preparation of the working drawings and of any necessary survey in connection therewith.

5. The above fees are exclusive of the wages of a clerk of works, which will be recoverable from the War Damage Commission, provided that the employment of a Clerk of Works is reasonable.

6. The above fees are exclusive of those for quantity surveying services. If such services are required, fees will be allowed, in addition, on the normal professional scale.

7. The above fees are inclusive of the fees of any consultant or specialist engineer by whom the architect or surveyor may wish to be advised.

8. Where repairs are carried out to several properties in the same area and in the same ownership, the scale of fees may be applied by reference to the aggregate cost of the work, provided that the premises are in the

same vicinity, that the same builder carries out the work, and that all the work is done at the same time. As far as practicable an aggregate specification will be accepted by the Commission.

Circumstances under which fees can be allowed

1. It is a condition of the allowance of fees that an appropriate specification or equivalent document conveying to the builder clear directions as to the work to be carried out is prepared before or at the time when the works are put in hand, and that the person charging the fees certifies that he has fully performed the services described under the appropriate heading or headings of the scale.

2. Fees for quantity surveying services will be allowed where the works cost more than £1,000, and where these services are rendered by a quantity surveyor or a firm of quantity surveyors practising as such, not being the person of firm rendering the services described in paragraphs 2 (a) or 2 (b) of the scale above.

Provided only that where the person or firm who has rendered the services described in paragraphs 2 (a) or 2 (b) of the scale above in the capacity of registered architect, is also in regular practice as quantity surveyor, fees for quantity surveying services may also be allowed where the certificate that these latter services have been performed is signed by the person (stating his qualifications) who has actually rendered such services, and also by the principal or firm with which he is connected.

3. Pending further discussion with the professional institutions concerned, the Commission has decided that the scale will only apply to works costing less than £100,000.

4. The scale is not applicable to cases where, owing to the special

nature of the work, the accepted practice would be for the work to be carried out under the direct supervision of an engineer (e.g. work on public utility undertakings such as gas and water services).

Note for information of the Press

This announcement replaces the announcement of 2 March 1942, the chief differences being an increase in the fees under paragraph (1) and in the fees under paragraph 2 (b) on works costing up to £1,000; and the scale of fees under paragraph 2 (a) being no longer applicable in cases where the works cost less than £500.

Under the War Damage Act the Commission may only make payments of cost of works equal in amount to the proper cost of the work executed. "Proper cost" is defined in Section 123 of the Act where it is stated to include "the cost of the necessary employment of an architect, engineer, surveyor, land agent or other person in an advisory or supervisory capacity in connection with the execution of the works." Accordingly it will be observed that fees are only allowable where the professional man acts in supervising the works of repair and that the Commission has no power to repay professional charges incurred by a claimant in making a claim for a cost of works or a value payment.

It is also to be borne in mind that the Commission may only pay an amount equal to the cost of the reinstatement of a damaged building to its form immediately before the damage, even though the work of reinstatement may, in fact, include alterations and additions. Professional fees, admissible in claims, must therefore be assessed on the basis of reinstatement in the original form, any additional fees on account of alterations and additions being a matter between a client and his professional advisers.

8 February, 1946.

Review of Periodicals

1945-46-I

UNIT PLANNING, DIMENSIONAL CO-ORDINATION

ENGINEERING NEWS-RECORD, 1945 October 18, pp. 114-9 : Cutting costs with modular design by A. G. Lorimer, Chief, Bureau of Archre., Dept. of Public Wks., N. York. General survey of use of 4 in. module in building design with special ref. A.S.A., A.62.

JNL., ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1945 August, pp. 153-9 :

Dimensional co-ordination, by Prentice Bradley. Survey of problem and outline of procedures followed by A.S.A. in production of A.62.

PARLIAMENT ; CIVIC

ARCHITECTS' JOURNAL, 1945 September 27, pp. 233-4 :

BUILDER, September 7, pp. 185-6 :

Rebuilding the House of Commons : lecture by A. G. Scott, architect for work.

ARCHITECTURE CHRONICLE (Moscow), 1945 April, pp. 12-13 :

Improvement of the design of the Palace of the Soviets.

PENCIL POINTS, 1945 October, pp. 107 — :

Telephone booth ventilation. Detail by F. D. Jockley.

OFFICIAL ARCHITECT, 1945 November, pp. 546 — :

Somerset County Police H.Q., by R. O. Harris & L. Mew, County archit. & assistant.

WERK (Zürich), 1945 Oct., pp. 298-9 :

Electrical station near Airolo : by C. & R. Tami. Views.

HOME AND BUILDING (Jnl., N.Z. Inst. Architects, Auckland), 1944 Autumn, pp. 18-19, 35 :

Hydro-electric Power Station, Piripaua, by P. W. D. Generator hall and offices.

COMMERCIAL

WERK (Zürich), 1945 March, pp. 71-6 :

Baur's (trading and commercial) building, Colombo, Ceylon. Large offices planned for hot climate.

ARCHITECTURAL FORUM, 1945 September, pp. 98-103 :

Show rooms in modern shops, examples illusd. for women's dresses, fabrics.

ARCHITECTURAL FORUM, 1945 September, pp. 120-1 :

Book shop, St. Louis, by H. Armstrong & J. P. Hunter.

ARCHITECTURAL FORUM, 1945 October, pp. 117-25 :

Motor salesrooms : Results of competition by General Motors. Winner R. T. Coolidge & D. C. Bird.

PENCIL POINTS, 1945 October, pp. 56-73 :

Office builds. Project for Schenley Distillers, Cincinnati, by W. Garber ; detailed analysis of siting, plan, design, inc. daylighting. Also publisher's office, Chicago, & offices for North West Airlines, Portland, Oregon.

REVISTA DE ARQUITECTURA (Buenos Aires), 1945 July, pp. 269-73 :

Mercado san Cristobal. Large reinforced concrete covered market, Buenos Aires ; three 18-metre span bays.

TRANSPORT & STORAGE

JNL. ROYAL SOCIETY OF ARTS, 1945 September 28, pp. 549-59 :

Design in modern transport. General review by Christian Barman. Vehicles, stations.

THE ARCHITECT, JNL. OF ARCHITECTS OF W. AUSTRALIA (Perth), 1945 September, pp. 14-8 :

Concrete and insulation in cold store construction. Paper by G. Wilson.

BYGGMÄSTAREN (Stockholm), 1945 No. 16, pp. 295-313 :

"Ship and house." Article by H. Zimdahl relating, historically, aesthetic of ship and house design, followed by article on modern ship design. Illusd.

AMERICAN CITY, 1945 September, pp. 103-5, 133 :

Tackling the airport enigma. Article by E. N. Smith, airports plg. consultant, Civil Aeronautics Ad., specially with reference to small town airports. Illusd.

WERK (Zürich), 1945 May, pp. 156-60 & folded plate :

Project for airport, Geneva-Cointrin, by J. J. Honegger and F. Quétant : Illusd. of competition design with detailed report on plan. Elevated loading platform for freight planes.

INDUSTRIAL

BUILDER, 1945 September 21, pp. 228-9 :

Factory at Potters Bar. Project by Joseph Hill, on octagonal plan.

ARCHITECT & BUILDING NEWS, 1945 September 21, pp. 184-8 :

Factory for Murex Welding, Waltham Cross. Welded steel frame and brick, architect A. B. Llewelyn Roberts [F.J.] Illusd. with struct. details and plan of canteen and assembly block.

L'ARCHITECTURE D'AUJOURD'HUI (Paris), 1945 May-June, pp. 45-63 : Industrial building in France during war. Factory for treatment of timber. Large works completed during occupation, with description of work under Nazis. Fine design in R.C. with umbrella truss roofs. Other factories described & illusd.

ARCHITECTURAL FORUM, 1945 October, pp. 129-36 :

Industrial buildings. Precision aircraft forgings by Wyman-Gordon Co., Harvey, Ill. by Schmidt, Garden & Erikson. Higgins aircraft plant by Kahn.

ENGINEERING NEWS-RECORD (News Issue), 1945 August 2, p. 8 : Industrial building, Manhattan, for Tishman Realty Constrn. Co., with truck road to all 13 floors. Project illusd.

WERK (Zürich), 1945 February, pp. 33-6 :

Spinning mill and office building "SIS", Arlesheim, by Suter and Burchardt.

L'ARCHITECTURE FRANÇAISE, 1945 July, pp. 9-10 :

Hygiene in the factory, changing rooms, lavatories, showers by R. Lebrét ; notes on need, siting, equipment.

HEATING & VENTILATING ENGINEER & JNL. OF AIR CONDITIONING, 1945 November, pp. 194-9 :

Industrial ventilation : a review of recent American data, by C. Tasker. Bibliog.

WELFARE: HOSPITALS, &c.

PENCIL POINTS, 1945 August, pp. 55-92 :
Hospitals. Special No. Articles: A type plan for a pediatric hospital unit by Hspl. Facilities Section U.S. Public Health Service. Sweden's system of public health. Mechanical plants, by I. Rosenfield, ch. archt. D.P.W., City of N. York. Bldgs. illud.: Midland Hspl., Michigan, by A. B. Dow; 35 surgical, 15 obstetrical beds, private hosl. Nursery bldg. for Children's Home Society of Calif., by P. R. Hunter. Project for highly specialised baby hospital, 30 cots, and clinic. T.B. Hspl. for Palestine, project by J. Neufeld. Health Centre, Elizabeth City, N.C., by A. M. Lubin. All illud. in detail.

BUILDER, 1945 November 2, pp. 349-50 :
Rebuilding project for Poplar Hospital, E. India Dock Rd., London, by T. E. Heysham [F.]. Perspective view.

WERK (Zürich), 1945 October, pp. 300-2 :
S. Giovanni district hospital, Bellinzona, by Jaegli & Brunoni. 130 beds on 3 floors in 4 bed wards.

THE MODERN HOSPITAL (Chicago), 1945 August, pp. 45-7 :
Hospitals, Honolulu, built by Quonset huts. Views and ward plans.

MODERN HOSPITAL (Chicago), 1945 August, pp. 68-70 :
U.S. Air Force hospital, Fairfield, Ohio. Illud.

MODERN HOSPITAL (Chicago), 1945 August, pp. 48-51 :
Modern hospital archt. competition, comments on results with particular ref. 1st prize design by Fisher & Fisher.

ARQUITECTURA (La Habana, Cuba), 1945 July, pp. 227-30 :
Children's Tuberculosis Hospital, La Habana, by Luis Duval. 3 storeys round courtyard.

ARCHITECT & BUILDING NEWS, 1945 September 14, pp. 170-2 ;
HOSPITAL & NURSING HOME MANAGEMENT, September, pp. 305-9 :
Factory medical centre, Leamington Spa, for Lockheed Brake Co. Clinic inc. surgery, rest rooms, dispensary, dental dept., physio-therapy, X-ray dept., etc. Plan in A. & B.N. only.

HOSPITAL AND NURSING HOME MANAGEMENT, 1945 October, p. 329 :
Lay-out scheme for suite for developmental examination of infants & pre-school children.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 November, pp. 277- :
T.B. Sanatoria with particular reference to Ballyowen, Dublin Comp. Article by Lionel G. Pearson. Plans, balcony design, etc. illud. Some illud. from J. S. Woodhouse "English sanatoria" thesis.

BUILDER, 1945 Oct. 5, pp. 266-73 :
Poole [founder's name] Joint Sanatorium, Middlesbrough; by W. & T. R. Milburn [FF.]. Inc. assembly hall, operating theatre suite, kitchen and dining block; nurses' home.

MODERN HOSPITAL (Chicago), 1945 September :
Hospital for aged mentally ill, Western State Hspl., Fort Steilacoom, Washington. Pavilion "infirmiry" with cottages for old people (not illud.) in gardens. Illud.

RESTAURANTS, BATHS, &c.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 November, pp. 271-6 :
Recent work of Miners' Welfare Commission, chief archt. C. G. Kemp. Pithead baths.

ARCHITECTURAL RECORD, 1945 October, pp. 101- :
Restaurants. Building Types Study 106. Analysis of space & layout: kitchen plan, airport restaurant, cafeteria and other examples illud. Airport kitchen planning "time saver standards".

ARCHITECT & B.G. NEWS, 1945 Oct. 12, pp. 26-7 :
An American "outpost inn," by F. Keally, with A. W. Dana, restaurant consultant.

WERK (Zürich), 1942 October, pp. 240-3 :
Open-air swimming bath on the Aare, Olten, by Frey & Schindler.

WERK (Zürich), 1942 November, pp. 257-79 :
Casino, Basel, by Kehlstadt & Brodtbeck & replanning of existing concert hall, with external murals by A. H. Pellegrini.

RECREATIVE

ARCHITECTURAL REVIEW, 1945 November, pp. 135-42 :
Congress Hall, Zürich, by Haefele, Moser and Steiger, fully illud. and described. Concert halls, congress and assembly-halls, exhibition space, lecture rooms, restaurants. One of most complete "arts centre" ensembles. R. Maillart consultant for R.C. structure.

PENCIL POINTS, 1945 September, pp. 93-7 :
The acoustics of music shells (open air bandstands), by H. L. Kamp-hoefner. Illud.

WERK (Zürich), 1945 July, pp. 193-5 :
Cinema Moderne, Zürich. Rebuilding by Keller and Mailliet. 600 seats.

ARCHITECT & BUILDING NEWS, 1945 September 21, p. 181 :
Village hall, Selworthy, Devon, by Edwin Gunn. Adaptation of stable.

ARCHITECT & B.G. NEWS, 1945 Oct. 12, pp. 19-20 ;
MUSEUMS JOURNAL, Nov. :
An Arts centre: model of project from "Plans for an art centre" by the Arts Council of G.B. & the Ministry of T. & C.P.

L'ARCHITECTURE D'AUJOURD'HUI (Paris), 1945 May-June, 45-7 :
Olympic stadium & park. Project by Perret for Paris.

SCHWEIZERISCHE BAUZEITUNG, 1945 October, pp. 161-8 :
Competition designs for national gymnastic & sports school, Maglienen. Biel. Lay-outs of whole scheme and individual bldgs. illud., inc. gymnasia, stadium. 1st prize W. Schindler.

EXHIBITIONS

WERK (Zürich), 1945 May, pp. 150-1 :
Fashions exhibition, Zürich, 1944, by Marc Piccard.

RELIGIOUS

ARCHITECTURAL RECORD, 1945 September, pp. 90-117 :
Churches. Building Types study 105. Article: trends in church planning and design: organ space requirements in "Time Saver Standard." Many examples of recent U.S. churches, all denominations. Illud.

BUILDER, 1945 September 14, pp. 205-6 :
St. Alban's, Holborn: design for rebuilding, by Giles Scott, Adrian Scott, & J. N. Comper (int.).

ARCHITECTURAL RECORD, 1945 October, pp. 91-3 :
Church heating systems by B. C. Wenner and J. T. H. Anderson. Detailed notes on steam heating & warm air duct systems; lay-out plans.

ARCHITECT & B.G. NEWS, 1945 Oct. 5, pp. 4-6 :
Prinknash Abbey: design, plan and ext. illud. By H. S. Goodhart-Rendel.

SCHOOLS

TIMES EDUCATIONAL SUPPLEMENT, 1945 September 22, p. 447 :
Schools of the future: a survey of building problems by R. Sheppard, archt. Prefabn. and extent of contribution. Sch. design.

WERK (Zürich), 1945 August, pp. 231-5 :
Cantons school, Solothurn, by Bracher. Large school; 2-storied class wing with 24 rooms for 36 pupils, 4 larger classrooms and lecture hall, etc.

WERK (Zürich), 1945 January, pp. 17-28 :
New schools, Zürich. Kornhausbrücke sch., by A. H. Steiner, and Primary sch., Fluntern, by W. Niehus. Both modern bldgs. of great technical and aesthetic interest. Fluntern sch. has mural paintings.

ARCHITECTURAL FORUM, 1945 October, pp. 126-8 :
Temporary demountable school, L'Ouverture, St. Louis, by Ch. W. Lorenz. Lightweight steel frame clad asbestos boards. Interesting design features.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 September, pp. 227-31 :
Brazilian schools. Photos of recent building. Notes by S. Loweth.

AMERICAN SCHOOL & UNIVERSITY (Annual), 1945, pp. 72-7 :
Daylighting the school plant, by Ch. Bursch & C. D. Gibson of Div. School House Planning, Dept. of Edn., Sacramento. Illud.

AMERICAN SCHOOL & UNIVERSITY (Annual), 1945, pp. 289-94 :
Prevention of school fires; structural, planning and equipment design.

ARCHITECTURAL RECORD, 1945 September, pp. 76- :
Planning for audio-visual education. School requirements for film; technical data on screens, electrical lay-out.

AMERICAN SCHOOL & UNIVERSITY (Annual), 1945, pp. 40-53 :
Problems in design and operation caused by multiple use of the school plant, particularly as schs. and community centres.

JNL., ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1945 September, pp. 171-83 :
Interim Rept. on Elementary schools by Ctte. apptd. by Lt.-Governor. Ontario. Recommendations on siting, detailed planning, insulation, heating and ventilation. Illud.

BUILDING, 1945 November, pp. 308-9 :
Nursery schools: some planning principles based on child-psychology by Dr. M. Lowenfield. Provision for play equipment.

ARCHITECTS' JOURNAL, 1945 Oct. 11, pp. 265-6 :
Nursery school at Belfast, by R. S. Wilshire; ground plan, views.

BUILDER, 1945 September 7, p. 193 :
Nursery school, Chatham, by R. L. Honey [F.], built by apprentice labour.

ARCHITECTURAL FORUM, 1945 September 28, pp. 122-3 :
Community nursery school, Ladue, Mo., by H. Armstrong. Small 2-room school with workshop and art room—open modern design.

EDUCATION, 1945 October 26, pp. 643-4 :
St. Audrey's senior school, Hatfield, Herts. Project by H. V. Lobb [F.], and project for a secondary Modern school by S. Gregson [F.]. County Archt., Isle of Wight.

UNIVERSITY BLDGS., TECHNICAL SCHOOLS

ARCHITECTURAL FORUM, 1945 September, pp. 104- :
"Oklahoma University goes modern." Article and illudns. debating style question for university bldgs. Inc. illudns. univ. press bldg. and printing plant, class rooms, women's dormitory.

BUILDING AND ENGINEERING (Sydney, N.S.W.), 1945 July 24, pp. 22-5 :

University of Queensland, Brisbane; proposed new buildings by Hennessey and Hennessey. View of lay-out, plan of women's college.

AMERICAN SCHOOL & UNIVERSITY (Annual), 1945, pp. 79-93, 113-6 : Technical and trade schools. Planning and equipment. Various articles.

THE BUILDER, 1945 November 9, pp. 368-71 : School of Anatomy, Cambridge, by Hall and Easton & Robertson completed 1939. Laboratories & research rooms, lecture theatres.

REVISTA NACIONAL DE ARQUITECTURA (Madrid), 1945 May, pp. 176-87 :

Faculty of Medicine and the clinical hospital, Granada, by A. Botella and S. Valata. Large classical style medical school.

SCHWEIZERISCHE BAUZEITUNG (Zürich), 1945 September 8, pp. 98-102 ; September 15, pp. 112-3 :

Competition designs for the veterinary-medicine faculty of Zürich university; Stücheli, winner. Clinic, research labs., teaching rooms, library, etc.

LABORATORIES

L'ARCHITECTURE FRANÇAISE, 1945 August, pp. 11-4 : Laboratories. Article on planning, & equipment, by P. Jolibois of Academy of Sciences & L. Vaugois, Chief Government archit. Illusd.

BUILDING AND ENGINEERING (Sydney, N.S.W.), 1945 August, pp. 20-1, 34-6 :

Building Experimental Station, N. Ryde, N.S.W., for Australian Govt. Plans of proposed bldgs., and account of programme of research.

MUSEUMS, GALLERIES; LIBRARIES

MUSEUMS JOURNAL, 1945 November, pp. 129-34 :

Ideal picture galleries. Paper by Sir Kenneth Clark, Director, Natl. Gallery; a lively & personal summary of the purposes of art galleries & desirable technical solutions. Examples quoted inc. Natl. Gall., Boymans, Tate, Natl. Mus., Stockholm, Kaiser Friedrich.

ARCHITECTURAL REVIEW, 1945 Oct., pp. 94-8 :

Swiss National Library, Berne (1929-31) by Oeschger, Kaufmann & Hostettler. Illus.

ARTISTS' STUDIOS; BROADCASTING STUDIOS

ARCHITECTURAL FORUM, 1945 September, p. 124 :

Artist's studio, by H. Armstrong. Single cell timber frame studio.

ARCHITECT & BUILDING NEWS, 1945 November 2, pp. 76-80 :

Broadcasting house, Copenhagen, by W. Lauritzen, built 1938-45. Concert hall for 1,200 and several studio concert rooms & many small recording studios.

DOMESTIC (general)

L'HOMME ET L'ARCHITECTURE (Paris), 1945 July-August, pp. 21-36 : Dwelling houses. Detailed functional analysis of house requirements for varying family sizes, room relationship, circulation, specialised uses.

PENCIL POINTS, 1945 September, pp. 66-71 :

"Can America afford new houses?" Economic study by A. W. McQuillan, jr., distribution of national income in relation to demand for homes; obstacles to mass production & achievement of low-cost housing programme.

HOME AND BUILDING (Jnl., N.Z. Inst. Architects, Auckland), 1944 Autumn, pp. 14-15 :

Home for "Aged and Friendless," Auckland. Project by C. B. Watkin for housing 50 persons inc. 5 married couples.

BUILDING, 1945 October, pp. 266-9 :

Terraced bungalows for the old, childless couples and small families. Article and illusns., by W. Segal.

ARCHITECTS' JOURNAL, 1945 September 13, pp. 191-5 :

Two three-bedroom timber houses, by Peter Thornton, British Columbia.

KEYSTONE (Jnl., Assn. of Building Technicians), 1945 October, pp. 9-10 :

The solar home. Article by R. Wallace, describing principle of design of houses by Keck with large glass wall areas overhung by eaves admitting winter sun, excluding summer sun.

HOUSING

ARCHITECT & BUILDING NEWS, 1945 November 9, pp. 95-100 :

Planning for new housing standards. Chadwick lecture by A. F. Russell. Family & neighbourhood requirements, daylight, density standards; district heating, refuse colln.

ARCHITECT & BUILDING NEWS, 1945 November 16, pp. 109-16 ;

ARCHITECTS' JOURNAL, November 22, pp. 386, xxxii ;

BUILDER, November 16, pp. 397-402 :

Housing policies & problems. Report of important conference organised by Assn. of Building Technicians. Speakers inc. Minister of Health, Prof. J. D. Bernal, F.R.S., Colin Penn, D. E. E. Gibson, Thomas Sharp, F. Gibberd.

TOWN AND COUNTRY PLANNING, 1945 Summer, pp. 61-5 : Glasgow's housing problems, by Sir Alexander MacGregor, M.O.H. Glasgow; size and character of demand.

ARCHITECT & BUILDING NEWS, 1945 September 7, pp. 145-50 ;

ARCHITECTS' JOURNAL, September 20, pp. 205-13 ;

BUILDER, September 7, pp. 188-92 :

Steel prefabd. houses at Northolt, by F. Gibberd and Donovan H. Lee.

Third type, designed for Brit. Iron & Steel Fedn.; specially fast erection.

BUILDER, 1945 Oct. 12, pp. 290-2 :

Experimental houses, Lea Hall, Birmingham, on the "Bryant" system; planned by H. J. Manzoni, city surveyor. Plans, view, secn., progress views.

BUILDER, 1945 November 2, pp. 346-8 :

Experimental houses, Coventry, by D. E. E. Gibson, City archit. Erected model. Steel frame, concrete block cladding; all loads on pre-cast concrete corner fdns.

ARCHITECT & BUILDING NEWS, 1945 November 9, p. 89 :

London County Council housing estate project for Loughton, Essex; photo of model.

JNL., ROYAL SANITARY INSTITUTE, 1945 Oct., pp. 233-44 :

Reconstruction and housing problems of Swansea: paper by J. B. Bennett, A.M.Inst.C.E., borough engineer and surveyor, and discussion. Town, housing schemes, and civic centre plans illusd.

KEYSTONE, 1945 November, pp. 11-12 :

Housing in Vienna: an example of successful nationalisation. Brief summary of 1923-31 housing.

TOWN AND COUNTRY PLANNING, 1945 Summer, pp. 69-73 :

Swedish housing and town planning: new ideals in building. Article by E. G. Sandstrom. The development of extensive housing with low densities.

PENCIL POINTS, 1945 September, pp. 72-81 :

Sweden's housing solution. Recent schemes for flats & terraces illusd.

THE BUILDER, 1945 October 19, pp. 312-3 :

Swedish timber houses: illusn. & description of erection technique of houses imported to G.B.

WERK (Zürich), 1945 September, pp. 271-7 :

Housing on "Gwad" estate, Wädenswil, by Fischli and Stock. Terraced bungalows on steeply rising site. 28 houses.

KEYSTONE (Jnl., Assn. of Building Technicians), 1945 October :

"The black holes of Calcutta." Note by Lt. R. W. Toms on Indian housing conditions to-day.

JNL., ASSN. OF ENGINEERS & ARCHITECTS IN PALESTINE (TEL AVIV), 1945 September, pp. 3-16 :

Present-day housing problems: in Palestine, by T. Reiser, Chief Engr., Jewish Agency, and in U.K., by C. W. Brown, chairman War Supply Bd. Latter article report to Govt. of Palestine.

ART & INDUSTRY, 1945 Nov., pp. 150-4 :

T.V.A. prefabricated houses. Illus.

BUILDING, 1945 November, pp. 309-10 :

The rising cost of temporary houses, by A. C. Bossom M.P. Notes on recent Govt. White Paper.

JNL. INSTITUTION OF MUNICIPAL & COUNTY ENGINEERS, 1945 September 4, pp. 52-63 :

Advance preparation of post-war housing. Sites at Guildford, Surrey, by S. F. Thorne and D.S.R. Moon. Road design, widths, materials, etc.

BUILDER, 1945 Oct. 12, p. 293, & subseq. issues :

The Preparation of sites for housing schemes: series by Raglan Squire [F.], of "Arcon."

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 October, pp. 235-48 :

Prefabricated house systems. In "Housing Forum." British Iron & Steel Fedn. Type 6, by Gibberd, "Orlit" (R.C. frame & panel); "Tomo" tempy. bungalow (stressed skin ply walls on timber frame) by Yorke, Rosenberg & Maddall. All fully illusd.

BUILDING, 1945 Oct., pp. 262-5 :

The Arcon Mark II [house]: prototype on Tate Gallery site (now Poplar), with constructional isometric and views.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 November, pp. 262-5 :

The "B-J" house designed by J. H. Markham for B-J. Structures; steel skeleton clad prefabd panels.

BUILDING, 1945 September, pp. 248-51 ;

NATIONAL HOUSE BUILDER & THE BUILDING DIGEST, August, pp. 13-7 :

"Howard" prefabd. permanent house, by F. Gibberd. Description and illusn. of models erected, Woolwich.

WERK (Zürich), 1945 January, pp. 29-32 :

"Nilbo" prefab. timber house, by Nielsen-Bohny Co., Basel; Hans Bernoulli and K. Meyer, archts. Illusd. drgs. and photos of erection and completed estate.

BUILDER, 1945 September 28, pp. 249-2 ;

BUILDING, Oct., pp. 274-7 ;

HOUSE-BUILDER & ESTATE DEVELOPER, Nov. :

"Orlit" permanent mass-produced house, by E. Katona. (H. B.): Constrl. details.

ARCHITECTURAL RECORD, 1945 September, pp. 82-5:

"Pre-built" laminated arch house by Wurster, Bernardi & Kump.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 September, pp. 206, 208-12:

"Scottwood" plywood prefab. house, by H. V. Diplock.

ARCHITECTS' JOURNAL, 1945 Oct. 4, pp. 245-8:

System of construction for a house of steel, by Max Lock and Miss Blanco White: scheme for 3-bedrm. house, alternative designs. Illusd.

ARCHITECT & BLDG. NEWS, 1945 Sept. 28; Oct. 5, pp. 7-9:

BUILDER, September 28, pp. 246-8:
Cottages, Marlow, Herefs.: Prinknash, Glos.: E. Clandon, Surrey (for the old), by H. S. Goodhart Rendel [F.]. (A. & B.N., Sept. 28: East Clandon: Oct. 5, the other two.)

FLATS: TOWN HOUSES (including CONVERSION)

JNL. R.I.B.A., 1945 August, pp. 288-9:

The "plus-granny" flat, by Olive Matthews, with plans by E. Armstrong. Bed-sitting-room for addition to one-family home.

JNL., CHARTERED SURVEYORS' INSTITUTION, 1945 Sept., pp. 109-11:
Conversion of existing houses: memorandum by C.S.I. to the Central Housing Advisory Committee's Sub-committee on the subject.

BUILDER, 1945 September 28, p. 251-2:

Conversion of requisitioned property. Article by P. F. Burrillidge, Boro. archt., Stockton-on-Tees, on conversion of houses to flats. Illusd.

ARCHITECTS' JOURNAL, 1945 November 15, pp. 348-68:

Conversion of old houses for contemporary housing needs. Articles by Ernst Freud on legal, financial & technical issues inc. plans of 19th centy. terrace houses converted to flats: by M. Gee. "For families only"—special reference family needs. Several conversion jobs illustrated inc. Alfred St. and The Circus, Bath, & medl. houses, Cambridge.

CLUBS, HOTELS, HOSTELS

ARKITEKT (Istanbul), 1945 No. 5-6, pp. 97-106:

Mountaineering club house, Taksim, by Güney and Aysu. Restaurant, games hall.

JNL., ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1945 September, pp. 184-9:

Saguenay Inn, Arvida, Quebec. Luxury country hotel by Fetherstonhaugh and Durnford. About 60 bedrooms.

AMERICAN SCHOOL & UNIVERSITY (Annual), 1945, p. 119:

A Youth hostel for every community, by L. N. Day, of American Y.H.: notes on need, planning, equipment. Illusd.

ARCHITECT & BUILDING NEWS, 1945 November 23, pp. 122-4:

BUILDER, November 23, pp. 412-5:
Hostel for single women, Warriston St., Carnytne, by R. Bradbury [F.]. Director of Housing, Glasgow. 36 flats, living rm. with bed alcove & scullery kitchen.

FARM BLDGS.

L'ARCHITECTURE D'AUJOURD'HUI (Paris), 1945 May-June, pp. 74-5:
Fish-breeding farm on Bouzaise at Beaune by Camelot & Herbe.

HOLIDAY HOUSES

CALIFORNIA ARTS & ARCHITECTURE (Los Angeles), 1945 July, pp. 24-7, 30-1:

Holiday houses, Michigan Lake, by J. & H. Weese, and Palm Springs, Calif., by J. P. Clark. Illusd.

COUNTRY & SMALL HOUSES

COUNTRY LIFE, 1945 November 9, pp. 812-4; 16, pp. 858-60:

The future of great country houses: I. by the Marchioness of Exeter: II. (The preservation of historical monuments: British & French methods compared) by Lord Methuen.

BUILDING, 1945 November, pp. 294-7:

"The house without a client: architectural doodling for the small house plan," by W. Segal inc. designs for small Mediterranean type house and other small bungalows.

ARCHITECTURAL REVIEW, 1945 Oct., pp. 108-10:

Small house at Highgate (Southwood Lane), at first rejected by borough council: by M. D. Furniss [A.].

SCHWEIZERISCHE BAUZEITUNG, 1945 Sept. 29, pp. 146-50:

Small house, Prilly, near Lausanne, by G. P. Dubois and Perrelet & Stalé.

BYGGMÄSTAREN (Stockholm), 1945 No. 14, pp. 250-70:

Small house and garden competition illusd. 12 designs for country houses and bungalows.

DOMESTIC DEPENDENCIES (in bldgs. generally)

AIR TREATMENT ENGINEER, 1945 September, pp. 201-3:

Industrial canteens, by H. H. Gratridge, A.M.I.H.V.E., outline of plan and equipt. requirements.

HOSPITAL & NURSING HOME MANAGEMENT, 1945 September, pp. 310-1:
Factory canteen, lay-out of equipment.

ARCHITECTURAL DESIGN & CONSTRUCTION, 1945 October, pp. 249-52:
Kitchen walls, floors & roofs. Notes on materials by O. Evans.

DETAILS, FITTINGS

TOWN AND COUNTRY PLANNING, 1945 Summer, pp. 66-8:

Planning for individuals, by H. Conolly, Deputy County Archt., Essex. Recommendation of use of movable partitions.

L'ARCHITECTURE FRANÇAISE, 1945 June, pp. 4-:

The window—historically by A. Laprade: metal windows by Schwartz, illustratg modern design.

ARCHITECTS' JOURNAL, 1945 November 8, pp. 335-40:

"The garden comes indoors": the growth & placing of plants indoors. Illusd. details of flower boxes & windows.

BUILDER, 1945 September 21, pp. 226-8:

The bells [and belfries] of London. Article by A. E. R[ichardson]. Illusd. by author's drawings.

ARCHITECT & BUILDING NEWS, 1945 September 14, pp. 161-2:

External renderings, by H. S. Goodhart-Rendel. No. 5 in Architectural components series, chiefly on 19th-century aesthetic.

WERK (Zürich), 1945 June, pp. 183-9:

In praise of fresco. Article by F. Pauli on recent Swiss fresco work by Pauli.

BUILDER, 1945 Oct. 5, p. 265:

STANDARDS REVIEW (B.S.I.), No. 2, pp. 13-16:
Standardisation: shop signs, bearing symbols \pm firms' names: suggested designs. Note by G. Maxwell Aylwin.

ARCHITECTURAL REVIEW, 1945 November, pp. 144-6:

Wireless cabinets for Murphy Radio by R. D. Russell and Eden Minns.

ARCHITECTURE (general)

TIMES LITERARY SUPPLEMENT, 1945 November 10, 529-31:

"There the great city stands." A long leading article reviewing the principal architectural books during the past 25 years & their influence on British archt. & plg.

REVISTA NACIONAL DE ARQUITECTURA (Madrid), 1945 February, pp. 36-57:

Centenary of the Escuela Superior de Arquitectura, Madrid. Buildings, educational system etc.: described & illusd.

THEORY

WERK (Zürich), 1944 September, pp. 261-:

Architectural theory. Articles: the necessity for and value of architectural theory, by Roth.

WERK (Zürich), 1945 February, pp. 42-8:

Building and art theory in the middle ages: continuation of article in 1944, No. 9, by E. Stockmeyer.

ARCHITECTURAL FORUM, 1945 September, pp. 149-154, &c.:

"Turtles and walnuts, morning glories and grass—Analysis of analogy between natural and structural forms," by F. M. Severud.

HISTORY

COUNTRY LIFE, 1945 Oct. 12, pp. 640-3:

Beverly, capital of the East-Riding: by G. B. Wood. Old towns revisited, xv.

ARCHITECT & BUILDING NEWS, 1945 November 23, pp. 127-:

Russian architecture: the historical background. Paper by J. Summer-son to Society for Cultural Relations with U.S.S.R.

ARCHITECTURAL REVIEW, 1945 November, pp. 119-21:

Assembly Rooms, York, by Lord Burlington, built 1730-. Historical and archl. description by Oliver Sheldon. Illusd.

JNL., AMERICAN INSTITUTE OF ARCHITECTS (Washington), 1945 October, pp. 160-6:

How Independence Hall [Philadelphia] was built. Article by J. Jackson on hall designed by Andrew Hamilton, based on James Gibbs.

COUNTRY LIFE, 1945 September 14, pp. 462-3:

Town houses in Syria. Illusd. article by T. Clarke on 17, 18 & 19th century houses in Aleppo and Damascus.

COUNTRY LIFE, 1945 September 7, pp. 420-3:

Mount Vernon, Virginia: George Washington's home, c. 1760, described by E. Underwood. Illusd.

L'ARCHITECTURE FRANÇAISE (Paris), 1945 August, pp. 19-22:

The geometry & proportions of Egyptian pyramids, by J. P. Lauer of Egyptian Archaeological services. Illusd.

ARKITEKT (Istanbul), 1945 Nos. 7-8, pp. 158-61:

The Heraklea at Latmos, Ionia: illus. art. by R. Duyuran & M. Müdürlü.

THE ROYAL ENGINEERS' JOURNAL, 1945 September, pp. 151-3:

Cæsar crosses the Rhine: extract from Palladio Bk. 3, Ch. 6 with drawing of timber bridge.

(To be continued).

PRACTICE NOTES

EDITED BY CHARLES WOODWARD [A.]

BUILDING REGULATION

Building Materials and Housing Act, 1945

This Act came into force on 20 December 1945 and is designed to facilitate the production, equipment, repair, alteration and acquisition of houses and other buildings, and to limit the price for which certain houses may be sold and the rent at which certain houses may be let. The Act applies to England, Wales and Scotland. Certain sections apply only to Northern Ireland.

The Minister of Works may purchase building materials and permanent equipment for buildings and make arrangements for their production and distribution. He may also, if requested by any local authority, carry out work in connection with the local authority's power to provide housing accommodation under the Housing Act, 1936.

For this purpose the Treasury may advance money to the Minister up to a total of £100,000,000 and no advances may be made after the end of September 1950.

If the Minister of Works has purchased building materials being structures ready for erection as houses, and the Minister of Health is satisfied that the cost of constructing houses from those materials substantially exceeds the cost of constructing houses of a similar size by traditional methods, the Minister of Works may sell to local authorities such building materials at prices fixed otherwise than by reference to their cost, or construct houses from those materials for local authorities at charges which are less than the full cost of construction. In such cases the Minister of Health pays to the Minister of Works such a sum as will secure that the latter Minister's Fund incurs no loss and makes no profit.

The Treasury may issue up to £200,000,000 to the Minister of Works in connection with structures erected under the powers given by the Housing (Temporary Accommodation) Act, 1944.

Advances may now be made under the Small Dwellings Acquisition Acts, 1899 to 1923, on the market value of houses, the limit of such market value being £1,500. (Prior to this Act the limit was £800.) An advance under the Housing Act, 1936, may be made on the estimated value of £1,500 of the fee simple in possession of a house, and the provisions relating to flats are to have effect accordingly.

Where a building licence for the erection of a house has been granted, either before or after the passing of this Act, which limits the price for which the house may be sold or the rent at which it may be let, it is an offence to sell or offer to sell, or to let or offer to let, the house in excess of such selling price or rent during the period of four years beginning with the passing of this Act. The fine is such an amount as will secure that the person committing the offence derives no benefit and a further sum of £100, or imprisonment not exceeding three months or both fine and imprisonment.

Where a building licence has been granted subject to a limit of selling price or rent, the local authority must register the condition as a local land charge under the Law of Property (Amendment) Act, 1925.

Building Licences

The present regulations concerning Building Licences are as follows:

1. Between 1 February and 31 July work costing up to £10 may be undertaken without a licence. In addition, £2 may be spent in each of these six months, but this sum is not cumulative. Work of an emergency character may be undertaken without waiting for the issue of a licence. The £10 and £2 allowances apply to separate dwellings, i.e. to each flat or tenement.
2. Licences for work costing up to £100 are issued by the local authority for any class of property. Licences for amounts above £100 for premises other than houses are issued by the Ministry of Works Regional Licensing Officers.
3. Local authorities may now issue licences in excess of £100 for the following class of work:—
 - (a) The erection of a new house with a maximum selling price inclusive of land, roads and services of £1,300 in London and £1,200 outside London, or a maximum rent exclusive of rates to be specified by the local authority. The licence is issued subject to town planning requirements.
 - (b) The rebuilding of a cost of works house not exceeding £100 r.v. in London and £75 r.v. elsewhere, subject to town planning requirements.
 - (c) The completion of a partly built house or the adaptation or repair of existing premises so as to provide additional housing accommodation.

(d) The repair of war-damaged houses to make them habitable so as to provide additional housing accommodation.

(e) Work on houses required by statutory notices.

In the County of London the local authority for the issue of building licences is the Borough Council, who may issue a licence for the erection of a new house, the preparation of a site for new houses or the rebuilding of a cost of works house, subject to town planning, Building Acts and bye-laws. On work costing more than £100 work must begin within two months after the issue of the building licence.

The issue of building licences to private owners for war damage repair which fits in with the local authority's programme of work should not be withheld pending prior consultation with and the agreement of the War Damage Commission. Rebuilding of cost of works houses and the repair of war damage exceeding £250 should still be the subject of agreement by the War Damage Commission of the specification and price, but the local authority should not withhold the building licence pending this agreement. Priority for housing will be given to:—

- (a) The preparation of housing sites.
- (b) The erection of new dwellings.
- (c) The rebuilding of cost of works houses.
- (d) The repair of C (b) houses on a lump sum or fixed fee basis.
- (e) Work licensed by local authorities which will increase housing accommodation.

This priority, called W.B.A. priority, is not to be given to war damage repair to an occupied house which is reasonably comfortable where the work will not increase housing accommodation. As from 1 January local authorities may give W.B.A. priority for work done under a civil building licence. The licence will be endorsed "W.B.A. priority" and the recipient should communicate with the Ministry of Labour's local office on starting work. Less urgent work will be placed in a lower category called "W.B.B. priority."

For the purpose of computing the cost of work referred to in paragraph 1 above, the services of any person who does not receive any payment or other valuable consideration for those services and the cost of any materials exclusively used by that person in performing those services are to be disregarded.

Civil Defence (Suspension of Powers) Act, 1945

This Act came into force on 10 December 1945 and applies to England, Wales and Scotland.

The Act suspends the obligation of local authorities to prepare air-raid precaution schemes under the Air-Raid Precautions Act, 1937. Any such scheme in force immediately before the passing of the Act is to cease to have effect.

The suspension is to remain until His Majesty by Order in Council directs that the powers under the Act are to be resumed. An Order may apply to all local authorities or only to some local authorities and may include all matters related to air-raid precaution schemes or only some of them.

The following provisions of the Civil Defence Act, 1939, are suspended by this Act from the date of the passing of the Act until such date as His Majesty may by Order in Council appoint. An Order may be made either generally or in relation to any area and may include all the suspended provisions of the Civil Defence Act, 1939, or only some of them.

Any Order in Council is to be laid before Parliament and if either House within forty days prays His Majesty to annul the Order, His Majesty in Council may do so, but without prejudice to anything previously done under an Order or to the making of a new Order.

No regulations have been made under Section 33 of the 1939 Act as to construction, alteration or extension of buildings for the purpose of making them less vulnerable to air-raids or for the provision of air-raid shelter.

The suspended provisions of the 1939 Act are as follows:—

Designation of premises for use for public purposes of civil defence, to enter on land, to construct or provide air-raid shelters and other premises and to carry out other work. (These powers were exercisable by local authorities under Part II of the 1939 Act.) The power of entry to carry out work of restoration or maintenance is not suspended.

Requirements on the occupier of factory premises or the owner of any mine or commercial building to provide air-raid shelter and the power of any such occupier or owner to execute works in connection with air-raid shelter. The training of employees by the employer in factories, mines or commercial buildings in regard to air-raid

routine. (These powers were exercisable by the factory inspector or local authority, and by the occupier or owner under Part III of the 1939 Act.)

The carrying out of any work by a local authority, and the preparation of any scheme or the carrying out of any work by an owner or occupier for the purpose of providing air-raid shelter. The restriction on the removal from its position of any shelter or appliance erected or fixed by a local authority before the beginning of the period of suspension. (These powers were exercisable by local authorities, owners and occupiers under Part IV of the 1939 Act.)

Requirements on public utility undertakers and the powers of the Central Electricity Board. (These requirements and powers were exercisable under Part V of the 1939 Act.)

Requirements as to obscuration of lights and camouflage. (These requirements and powers were exercisable under Part VI of the 1939 Act.)

Plans for the removal of the civil population from one area to another in the event of war, except the carrying out of such plans put into operation before the beginning of the period of suspension. (Section 56 of the 1939 Act.)

Schemes for the supply of water for extinguishing fires. (Section 58 of the 1939 Act.)

Compulsory hiring of land and the power of entry and inspection. (These powers were exercisable under Part VIII of the 1939 Act.)

In moving the second reading of the Bill on 5 November 1945 the Secretary of State for the Home Department said:—"The Government have directed that a careful study should be made of the effects of the most recent forms of air attack, and that the civil defence organisation as hitherto known should be reviewed to see what adaptations and modifications are needed to meet the requirements of the country, should the country unhappily again be attacked from the air. . . . We shall in due course know a great deal more about civil defence requirements, the standard of shelter that ought to be provided and the type of organisation best fitted to deal with air attack. . . . The House will probably wish to know the reasons why the Government propose that, when the time comes to revive the suspended provisions, the procedure proposed is by way of Orders in Council instead of by substantive legislation. The explanation is that it is not contemplated that the revival of the suspended provisions shall be dependent upon the international situation or upon domestic politics. As and when the existing organisation in all its ramifications is reviewed and it is possible to prescribe a new technique, in the light of the experience of the hostilities now ended and of intelligence as to any new form of attack that seems possible, it is intended that the process of rebuilding Civil Defence within the framework of legislation now sanctioned shall begin again in a quiet and orderly fashion."

For that reason, for example, it is proposed in the Bill that an Order may be made generally or in relation to any area and either in relation to all provisions of the Civil Defence Act, 1939, or in relation to any particular provisions. It seems to the Government that it would be better to proceed piecemeal and gradually, than to wait until guidance can be given upon every aspect.

WAR DAMAGE

War Damage (Valuation Appeals) Act, 1945

This Act came into force on 10 December 1945 and extends to England, Wales and Northern Ireland but not to Scotland. Under Section 32 of the War Damage Act, 1943, an appeal from a determination of the War Damage Commission as to a value payment lies to one of the panels of referees appointed under Part I of the Finance (1909-10) Act, 1910.

By this Act such appeals lie to a special tribunal set up under the Act. The President of the panel forming the tribunal is a barrister-at-law of at least seven years' standing, appointed by the Lord Chancellor. Other members of the panel are barristers-at-law of at least seven years' standing, the number being determined by the Lord Chancellor, and persons experienced in the valuation of land appointed after consultation with the President of the Chartered Surveyors' Institution. A judge of county courts is eligible to be appointed president or a member of the panel.

Members of the panel are paid such remuneration (if any) and such travelling and subsistence allowances as the Lord Chancellor, with the approval of the Treasury, may determine.

Where, in an appeal, there is a difference of opinion between members of the tribunal, the decision is to be taken by the votes of the majority, with a second or casting vote by the person presiding if the voting is equal.

The decision of the tribunal is final, subject to the right of any party to the reference to require the tribunal to state a case on a point of law for the opinion of the High Court, or of the county court where the War Damage Commission's valuation appealed against does not exceed five hundred pounds or the value payment does not exceed that amount.

The Lord Chancellor will make rules for regulating appeals and references to a tribunal, and the rules will provide that where there is an appeal to one of the panel of referees referred to in Section 32 of the 1943 Act which has not been begun at the commencement of this Act, the appeal will be heard by a tribunal appointed under this Act.

War-Destroyed Houses Rebuilding of Cost of Works Cases

The Government's two-year housing programme includes provision for the rebuilding of some 40,000 houses (half of them in London) which were destroyed or seriously damaged by enemy action and which fall within the limits of the Rent Restriction Act (a rateable value not exceeding £100 in London and £75 elsewhere). These were homes which have been classified under the War Damage Act as "not total losses." They qualify for a cost of works payment, and their owners are entitled to have the reasonable cost of the work of rebuilding paid for by the War Damage Commission.

The number of applications received by the Commission to date for authority to rebuild suggests that private owners are not fully aware of the facility offered or the procedure to be followed. To the end of 1945 fewer than 5,000 had taken the first step towards the rebuilding of their houses. The problem in London is, for obvious reasons, one of some difficulty, but it is felt that even there much more is possible. A simplified form of application for a licence to rebuild a destroyed house eligible for a cost of works payment, and for approval of the proposal by the Commission, has been drawn up and will be obtainable from local authorities.

Part I of this form, which is the application for a licence, is to be filled in by the claimant or his professional adviser, and returned to the local authority. The local authority will, if it is prepared to issue a licence, send the whole form to the appropriate Regional Office of the Commission, notifying on Part II its approval. Part III will be completed by the applicant in consultation with the Commission, and relates to agreement on contract price and on the plan and specification. Notes are attached explaining fully the steps to be taken, and the applicant is informed that when told by his local authority that the matter has been referred to the Commission he should make all arrangements for the rebuilding work up to the actual acceptance of the proposed contract price. Every effort will be made by the Commission's staff to deal speedily with the cases submitted to them. Payment by instalments can be made during the work of rebuilding, and, if desired, there can be an arrangement to pass the money direct to the builder. It should be made clear that the Commission can consider only those proposals for rebuilding which are based on a fixed price estimate.

The Commission has already suggested that where houses which have been destroyed were so grouped that a number can be rebuilt by one builder under the supervision of one professional adviser, the owners should consult together and arrange a joint rebuilding scheme. The method is one which, by eliminating duplication and overlapping, makes for speed. With the co-operation of architects and builders it is being operated successfully in all parts of the country.

TOWN PLANNING

The Minister of Town and Country Planning has made an Order appointing 1 January 1946 as the date upon which it has become practicable for a local planning authority to apply to him for a Declaratory Order for the compulsory purchase of land under section 1 (1) of the Town and Country Planning Act, 1944. (S.R. & O., Town and Country Planning, England and Wales, Compulsory Purchase, 1945, No. 1666.)

The Minister has issued Amendment Regulations (No. 2) and a General Transitional Amendment Order the effect of which is to extend the period for the completion of certain formal stages of planning schemes. (S.R. & O., Town and Country Planning, England and Wales, 1945, No. 1643, and S.R. & O., 1945, No. 1304.)

HOUSING

Ministry of Health Circulars to local and housing authorities. 232/45. W.B.A. priority for housing will be given to the preparation of housing sites, the erection of new dwellings, the rebuilding of cost of works houses, the repair of C (b) houses on a lump sum or fixed fee basis and work licensed by local authorities which will increase housing accommodation.

W.B.A. priority is not to be given to war damage repair to an occupied house which is reasonably comfortable where the work will not increase housing accommodation.

As from 1 January 1946 local authorities may give W.B.A. priority for work done under a civil building licence. The licence will be endorsed "W.B.A. priority" and the recipient should communicate with the Ministry of Labour's local office on starting work.

Less urgent work will be placed in a lower category called W.B.B. priority.

219/45. 10/12/45. The Essential Work Order will cease to apply

to war damage repairs in the London Civil Defence Region after 17 January 1946.

231/45. 28/12/45. The issue of a building licence to private owners for war damage repair which fits in with the local authority's programme of work should *not* be withheld pending prior consultation with and agreement of the War Damage Commission.

233/45. 27/12/45. In the Administrative County of London area building licences for the building of new houses by private enterprise will now be issued by Metropolitan Borough Councils. The licence may be for the erection of a new house, the preparation of a site for new houses or the rebuilding of a cost of works house. All necessary approvals under Town Planning, Building Acts and bye-laws must be obtained from the L.C.C. On works costing more than £100 work must begin within two months after the issue of the building licence.

237/45. 28/12/45. The issue of buildings licence by local authorities in excess of £100 in respect of new houses and other work to houses is extended beyond 31 December 1945 for the time being. Fresh instructions on licensing generally will be issued during January.

15/46. 16/1/46. This Circular was issued to local and housing authorities in the London Civil Defence Region. No cost plus contracts are to be renewed after the date of this Circular without reference to the District Office, Ministry of Health. The Circular encloses documents recommended for use where the local authority has not an approved method of fixed-price contracting. The scheme is adaptable where the contracts are of large or moderate amount or where the houses to be repaired are extensively or only superficially damaged. The documents are a form of tender, a specimen specification, preliminaries, a preamble to builders' work, and the R.I.B.A. Form of Contract, revised 1945, where quantities do not form part of the contract, and which is designed for use by local authorities.

The Specification is to include measurements of important items and the extent of the work should be shown room by room and house by house.

Panels of architects and surveyors are being set up by the Minister of Health to assist local authorities, and their fees will be paid by the War Damage Commission on the published scales.

OBITUARIES

The late Captain LUDOVIC GORDON FARQUHAR, M.C. [F.]

We regret to record the death of Ludovic Gordon Farquhar, late Captain of the 2nd Battalion The Gordon Highlanders. Captain Farquhar was repatriated from a Japanese prison camp in Thailand at the end of October and died at his home, 3 Pinemead Court, London, on 23 December.

We have received the following appreciation of Captain Farquhar from his partner, Mr. Francis Lorne [F.] :

"With the passing of Ludovic Gordon Farquhar, M.C., F.R.I.B.A., this country has lost one of the most promising of its younger architects. Burnet, Tait & Lorne, one of the best of partners and his family one of the most endearing of personalities. Born 46 years ago at Bridge of Weir in Renfrewshire, the son of the late Andrew Farquhar, who was a considerable member of the business life of Glasgow, and of Hilda Harrington Mann, a woman of unusual artistic gifts and the sister of Harrington Mann the portrait painter, Farquhar grew up with a wonderful blending of the business acumen of his father and the artistic abilities of his mother. Added to this he got also from them an uncommonly gracious personality and a vital interest in all things mental and physical. It is very rare in life to find anyone combine so many fine qualities; no wonder he carried so many things in front of him in his short span of years.

"During the early part of the last world war he was at school and on leaving he entered Sandhurst and passed over to the 1st Battalion The Gordon Highlanders to see the end of the war in France. Shortly after the war, the call to architecture came and eventually he took his degree at the Glasgow School of Architecture and spent some time with Campbell & Hislop in Glasgow. Very soon he was in London with Sir John Burnet and soon after that with the late Bertram Grosvenor Goodhue and the late Raymond Hood in New York City. He returned to London in 1931. In the office of Burnet, Tait & Lorne he soon showed his worth in carrying more and more responsibility, until there can hardly have been any job, large or small, for the execution of which he was not responsible. He became a partner in 1937.

"His was in many ways a meteoric rise, but it was not surprising when one realised his unusual range of gifts and how graciously he used them. Perhaps no one helped so much over the preparation of the office book of Burnet, Tait & Lorne from its very beginnings to its completion. His American training made him so capable to help and, too, his heart was in the idea. No drawing office ever ran so smoothly because his hand was always on the regulator and what a sympathetic hand it was! The draughtsmen loved and respected him; the most difficult of clients almost automatically gravitated towards him and the builders and technical specialists all felt, with justification, that they had an understanding and sympathetic friend. There will be many in the building life of London and wherever the office worked, who will mourn his loss. He could look at the practical, the aesthetic and the sociological issues of a problem almost automatically and then put the solution over with such quietness and naturalness of manner that one wanted to do what he said, because one wanted to please him, because one felt he was right and because one felt it was one's very own idea he was developing; a rare gift that, how outstandingly rare!

"Being on the reserve of officers of the Gordon Highlanders he was called up at the beginning of this war and went with the 2nd Battalion

to Singapore, where he won the M.C. in the fighting there. Here is the citation:—

Captain L. G. Farquhar, 2nd Battalion The Gordon Highlanders.

"As a Company Commander during the period 25 January to 15 February 1942, in the fighting in Johore and Singapore this officer by his skilled leadership and personal bravery enabled those under him to inflict very severe losses on the enemy on at least five occasions. At all times he inspired those under him with the sole object of attacking the enemy and by his determination and gallant conduct set a special example to all."

"At the fall of Singapore he was sent as a prisoner of war to work on the Bangkok-Moulmein railway. The hardships he endured there will never now be fully known for, although he got home again, he succumbed shortly afterwards, on 23 December 1945. And so passed into history one of the most promising of young architects, one whose very abilities and training so richly equipped him to take a commanding place in the architecture of our time.

"He is survived by Marie Lorne Farquhar and no architect ever had a more sympathetic and understanding wife—his progress being her daily wish—and his young daughter Lorn aged 12, already showing many of her father's characteristics. He is survived, too, in the work sphere by many young architects throughout the Empire who came under his influence in the office and who will always bless the day they did. Long may his influence last."

The late F. WYKEHAM CHANCELLOR

We regret to record the death of Frederick Wykeham Chancellor [F.]. The following appreciation is by Mr. A. E. Wiseman [F.], President of the Essex, Cambridge and Hertfordshire Society of Architects:—

"The county of Essex and its people have sustained an irreplaceable loss in the passing of Frederick Wykeham Chancellor, M.A., F.R.I.B.A., on 21 December 1945. His encyclopaedic knowledge of the history of Essex, its peoples and ancient buildings was unsurpassed, and as a lecturer he was known throughout the county—his gift was such that he could transport his listeners back to Roman days, in which the march of legions could be heard.

As First Chairman and Founder Member of the Chelmsford Chapter of Architects, he was a tower of strength, and his enthusiasm did much to ensure its foundations were well laid, and he was subsequently elected President of the Essex, Cambridge and Hertfordshire Society for 1929.

Wykeham Chancellor was steeped in Gothic tradition; he would, I think, have been the last man to describe himself as a great architect in that he designed large and magnificent buildings, but thanks to his care and knowledge, posterity will enjoy the many lovely churches and buildings which he mended with such skill and loving care, enduring monuments to a good man.

In writing of Wykeham Chancellor one remembers his charm of manner, his keen sense of humour, which so often would break into the Essex dialect of which he was an expert, an indomitable strength of mind which in latter years transcended pain and suffering resulting from an accident and, above all, his uprightness of character and integrity in the profession which he loved and adorned, I for one am proud to have been a friend of Wykeham for 24 years, and with countless others mourn the loss of a man, whom we remember with affection and esteem."

Biographical Note

Frederick Wykeham Chancellor was born in 1865. After securing his degree at Pembroke College, Oxford, he entered the office of his father, Frederick Chancellor, at Chelmsford. In 1896 he became his father's partner and practised with him until 1918, after which he carried on the practice alone.

His principal architectural works include the church of All Saints, Goodmayes, Essex, additions to Blundell's School Chapel, many parsonages and private houses in Essex and elsewhere, restoration and preservation of several ancient houses in Essex. He was Diocesan Surveyor from 1902 to 1945 and at one time architect to the Coach-makers' Company. His literary work included many articles in the Essex Archaeological Society's Review.

He was a member of the R.I.B.A. Council in 1930-31; President of the Essex, Cambs. and Herts. Society of Architects 1929-30; Chairman of the Chelmsford Chapter 1928-29. The practice is being carried on by Mr. R. M. Simpson [A.] and Mr. G. J. Bragg [L.] as Chancellor, Simpson & Bragg, 19 Duke Street, Chelmsford.

The late W. R. DAVIDSON, Hon. F.R.I.A.S.

Mr. H. H. Wigglesworth has sent us the following appreciation:—By the sudden death of Walter Ramsey Davidson at his house in Aberdeenshire on 22 December, domestic architecture in Scotland has lost a masterly exponent of the art.

Walter Davidson was delicate in his youth and his early studies

were directed by a tutor. This may have tended to emphasise a modest appreciation of his own attainments. He never seemed to realise that he put far more into his work than was customary even in the enthusiasm that architecture so freely develops.

His education continued at Cambridge where he graduated from Caius College. Then he went to Niven and Wigglesworth's office in London as a pupil and following this to Edwin L. Lutyens' office, where he spent some years in the happy company that was attracted there. Thereafter he set up practice, sharing an office for some years in Lincoln's Inn with Vincent Harris.

Davidson's practice was in domestic architecture and in this he steered clear of the commonplace without any apparent effort. His work was conscientious, most thoroughly studied and completely satisfying. It is unmistakably Scottish with a sturdy refinement that at once attracts attention, an example to the student of what can be attained in building by well directed effort.

He inherited Dess, Aberdeenshire, upon the death of his elder brother and then retired from practice. His influence in the North must have been of great value in preserving what was good and restraining misguided proposals.

A friendship of sixty years' standing cannot be interrupted without grief. To the writer the loss is irreparable, but the memory of cheerful companionship and unfailing constancy can never be separated from gratitude for lives like his which were good.

BOOK NOTES

HOUSE SPECIFICATION.

Specification for Houses: Compiled with special reference to damp and weather-proof construction. 4th edn. sm. fo. 57 pp. Building Estimator Publications, Cardiff. 1945. 15s. post free.

REVIEWED BY S. POINTON TAYLOR [F.]

Mr. B. Price Davies has entirely revised his well-known *Specification for Houses* in a fourth edition dated 1945. It is compiled with special reference to "Damp and weatherproof construction," includes up-to-date detail drawings of construction and is fully indexed. It has been brought into general harmony with the Ministry of Health and Ministry of Works latest Housing Manual Technical Appendices 1944 and the British Standard Specifications up to September 1945.

Supplemental notes and some 300 more descriptive diagrams will be issued in another book as soon as paper supplies become easier.

The author's wide and long experience of this class of work has enabled him to absorb very readily and put into appropriate specification form the more modern approaches to the problems of building arising from empirical or scientific research and largely embodied in British Standard Specifications, for which this Institute bears its share of responsibility.

Many of these British Standard Specifications are now obligatory in connection with housing proposals of Local Authorities, and writers of specifications for such work will have to deal with the matter in one way or another.

Mr. Price Davies refers to B.S.S. and British Standard Codes of Practice in a general clause under "Labour and Materials" and specifically in relation to components of building under the various trade headings without reference to producers' names. This method is liked in principle by contractors, but there will be some favoured architects who will still be allowed by their clients to couple with the B.S.S. conditions the name of a particular producer.

The chain of responsibility for B.S. Specifications is worth noting. First we have the Local Authority under obligation to ensure the adoption of certain B.S.S., and their architects are instructed accordingly. The architect passes on the responsibility to the contractor, who should pass it on to the producer, who in turn may protect himself behind the "Mark" section of the B.S.I. Many of the B.S.S. tests are serious and quite beyond the capacity of the normal architect. Where, then, throughout the chain of responsibility does the real responsibility lie and are most of us clear about the proper procedure? It might be well worth the appropriate committee of this Institute giving some precise directions on the proper procedure as soon as possible. The matter is not free from vagueness as it stands at the moment.

The Specification is rightly omnifarious and the author suggests ways of dealing with surplus items or, indeed, any items not included by means of a "Schedule No. 3" (the main specification being "Schedule No. 2" and the Forms of Contract "Schedule No. 1"), but most of us will prefer to cut out all the dead wood from our contract documents. There is also a fair amount of cross reference which is always annoying but perhaps less annoying than repetitions.

It would take too long to deal with the excellent trade sections or the exceptionally useful set of "Preliminaries" in detail, but amongst many clauses in the latter that on "Entirety of Contract" seems to us particularly well phrased.

To the student as a guide and to the practising architect as a refresher this 1945 edition is recommended.

Outline of English Architecture, by A. H. Gardner, A.R.I.B.A. 8vo. vi. + 122 pp. + 150 illus. Batsford. 1945. 12s. 6d.

REVIEWED BY W. W. BEGLEY [A.]

"The aim of this book is to give a readable account of the development of architecture in England, and it is written for the general reader. . . . The author's aim is well carried out. William Morris would have found it agreeably free from "the cloud of sham technical twaddle" which bemuses so many readers, for it is a vivid and straightforward description of all the varied types of English buildings, from pre-Roman remains up to the present day, and with a glimpse into the future.

The illustrations are well chosen and up to the high photographic standard of Messrs. Batsford's recent publications.

In fact, if you have a friend who betrays a lamentable ignorance of architecture, or a client who needs to be tactfully led to a due appreciation of your efforts, this is the book to give him. Nevertheless, there is nothing elementary about Mr. Gardner's letterpress. There are probably few architects who would not derive some benefit from reading it.

My only criticism is really a suggestion and is that in any future re-issue some photographs of late eighteenth-century small town houses should be added. On page 92 the author does full justice to their charm, but, since they form such a substantial part of the texture of English architecture, photographs illustrating their adaptability and neighbourliness in streets, and their typical features, are called for. An appreciation of architecture can be, and frequently is, stimulated by the elegance of their doors, porches, balconies, staircases, cupboards and fireplaces. Ten or a dozen additional pictures would not be disproportionate as these Georgian houses are so numerous and so accessible to the beginner.

BOOKS FROM NORWAY

Norske bygningskunst fra Urnes til Universitet. Edited by Anders Bugge, Henrik Grevenon, Georg Eliassen, Thor B. Kielland. 4to. 41 pp. + 150 pl. Oslo. Aschehoug. 1927.

Laftehus, by Halvor Vreim. sm. 8vo. 55 pp. Oslo: Norske Arkitekters Landsforbund. 1943.

Planlegging av Tettbygdé strok paa Norsk Landsbygd, by Olav Halset. sm. 8vo. 23 pp. Oslo: N.A.L. 1940.

Hus i Norge, by Oda Brochmann. 4to. 118 pp. Oslo: Aschehoug. 1944.

Bedre byggeskikk. 4to. 74 pp. Oslo: Arkitektforening.

Through the kindness of Mr. Munthe Kass, one of the Institute's honorary corresponding members in Norway, the Library has recently received its first gift of Norwegian publications since the start of the war. The books include one general history of Norwegian building,

Norske bygningskunst fra Urnes til Universitet. Edited by Anders Bugge, Henrik Grevenon, Georg Eliassen, Thor B. Kielland. 4to. 41 pp. + 150 pl. Oslo. Aschehoug. 1927.

The City 53

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Norske byggekunst fra Urnaes til Universitet (1927), which deals with work from the eleventh century "stave" church at Urnaes up to the mid-nineteenth-century buildings of Oslo University. There are 150 excellent illustrations.

Laftehus, an historico-technical work (1943), describes in detail and with excellent illustrations the Norwegian technique of log house construction which has survived in use from the earliest periods. This is a publication seemingly directed as much at the general public as the profession and is published by the Norske Arkitekters Landsforbund.

In the same popular N.A.L. series is a booklet (1940) on the planning of built-up areas in the Norwegian countryside: *Planlegging av Tetthygde* (book part *Norsk Landsbygd*). Among the drawings is a design for a small recreation and sports centre.

Hus i Norge (1944), by Brochmann, is an introduction to the understanding of Norwegian house design principles, traditions and methods, charmingly illustrated by the author's drawings.

Bedre byggeskikk, or better building, is a 1931 publication celebrating the 25th jubilee of the Oslo Architectural Association by description and illustration of recent building.

The other publications include rare war-time issues of *Bygge Kunst*, which is now being received regularly from Norges Arkitektforbund.

OTHER PEOPLE'S TROUBLES

The City is the People, by Henry S. Churchill. 8vo × 186 pp. + 53 pl. New York: Reynal & Hitchcock. 1945. \$3.

REVIEWED BY LIONEL BRETT [A.]

If it is true that the contemplation of other people's troubles lightens the burden of our own, this forthright and disillusioned survey of the American planning front can be confidently recommended to the British planner of towns. (It is not, in the narrower sense, a book for architects). The book belies its nineteen-fortyish title, which leads one to expect another starry-eyed hand-out from the C.I.A.M. boys, and after a very sketchy and therefore boring historical overture, gets right down to brass tacks.

The author's object is presumably to explain how the city planning problem originated and to indicate solutions. So much is implied by his chapter headings (Antecedents, Precedents, Approach, Problems, Efforts, Trends), and announced on the wrapper, where "his text brilliantly analyses the programme in all its facets—political, physical, financial, sociological, economic and aesthetic." The trouble is that you cannot get all that into 180 pages. A nearer objective is essential. Without it, the book suffers from uncertainty of purpose. Attempting the impossible, the author skates impatiently and inadequately over some things, resorts to indigestible and (to the foreigner) unintelligible shorthand for others. Worst sufferer of all is the historical section, "Planning through the Ages" in 19 pages, which gives an unfortunate impression of airy indifference and is a poor introduction to an other-

wise sincere and useful work. Here, for instance, is the nineteenth century:

"The exploding shell replacing solid shot. . . Imperialism, the concept of *laissez-faire*, the concept of democracy, the right of anyone to sleep under a bridge if he wishes to."

There follows a retrospective glance at the development of American town-planning proving that, with the exception of certain small colonial towns and Washington itself, this has been practically non-existent until our own day. "The conception of the individual house on its own lot, unrelated except in spirit to its neighbours, is the essence of the American city plan." (cf. Frank Lloyd Wright). The problem of carving cities with character and significance out of a thousand such jungles of individualism, without the help of history or the *genius loci*, makes our English job look easy. From the remote past the author passes rapidly to more recent attempts at replanning, which he succeeds in making look pathetic, and so headlong into the financial administrative and physical obstructions of the present.

In the light of this race against time and space to which Mr. Churchill has committed himself, the quantity of hard sense and aphorism to be found in the book is most remarkable. The following examples are characteristic, and may help to show the value of the book to the British reader:—

"The professional planners have become bogged down in the survey and the statistic. . . They have sought the comfort of the unassailable fact to be presented to the keen-eyed executive, and so have missed the excitement of inciting the voters to riot."

The residential location in relation to the place of employment of the workers in a department store or large insurance company employing six to eight hundred people is as important as that of the same number of workers in a factory. No effort has yet been made to handle this problem, possibly because 'white collar workers' are considered super-proletarian by themselves, and sub-human by their employers.

The planner or architect who whispers about doing something merely because it would be beautiful and delightful simply sticks his neck right under the knife."

Lastly, an American definition of Research, quoted by the author from Warren Vinton of the Federal Public Housing Authority:

"The accumulation of irrelevant statistics in order to proceed from an unwarranted hypothesis to a foregone conclusion."

In short, an uneven book, not without errors (the English precinct, for instance, is not "an administrative unit"); in some places, for reasons given, an irritating book; and in others, possibly through no fault of the author, an unintelligible book; but a book which nevertheless is well worth the attention of the British planner as evidence of a new realism in American thought, of a readiness to grapple with facts instead of dreaming dreams, and of a delightfully disrespectful attitude to Authority that might profitably be cultivated here, within the usual limits.

Correspondence

ROYAL WEST OF ENGLAND ACADEMY SCHOOL OF ARCHITECTURE

The Editor, THE JOURNAL R.I.B.A.

DEAR SIR,—May I be permitted to correct an erroneous statement which appears in the obituary notice of Mr. Mowbray Green, of Bath, in the January issue of the JOURNAL, to the effect that the Royal West of England Academy became the Bristol School of Architecture?

It is true that the school was founded under the auspices of the Academy, and that it is still known as the Royal West of England Academy School of Architecture (and not as the Bristol School of Architecture as stated by your correspondent), but this Academy still continues as a separate institution in Bristol quite apart from the activities of the School of Architecture, which latter has now stood on its own feet for many years now.

Yours faithfully,

A. FALCONAR FRY [A.].

ARCHITECTURAL EDUCATION

The Editor, THE JOURNAL R.I.B.A.

DEAR SIR,—Lieut.-Colonel Gill's letter, published in the December JOURNAL, poses a major problem, but, for the following reasons, I do not think he will find it so distressing as he anticipates.

I believe that the "1938 outlook," which, presumably, obtained when Lieut.-Colonel Gill was last a student, is now (at least in London) an unpopular rarity, even among civilians.

The majority of the 1946 "mob of seventeen-year-olds" is neither so pimply nor so "precious" as the 1938 mob, since their complexions have been conditioned by the basic cabbage, and their outlook on reality by aerial bombardment.

The standard of work of any group of students will probably be set by the keen and mature students (even if these are a minority) rather than by the youngsters, who are likely to be "towed" at a somewhat breathless pace.

I was one of the youngsters of such a group after the last war, and have now to lecture to a similar group, so I have observed this tendency from two angles, and I feel that the ex-Service students will give enormous impetus to the work of any school.

We have been missing them for a long time.

Yours faithfully,

MARY WALL [A.].

The Editor, THE JOURNAL R.I.B.A.

SIR,—The letters from Mr. Anthony Herbert and others on the subject of the Junior Assistant are welcomed as giving an opportunity to make it known that this matter is receiving the attention it rightly deserves by the Board of Architectural Education and others concerned.

The importance of the matter both to many practising architects and to the students themselves is fully appreciated.

I am, Sir,

A. B. KNAPP-FISHER [F.],
Acting Chairman,
Board of Architectural Education.

NOTES

R.I.B.A. PRIZES AND STUDENTSHIPS

Suspended during the war, the Annual Prizes and Studentships of the R.I.B.A. have now been re-opened for competition. The closing dates of entry for the Tite Prize and Victory Scholarship have already been announced (15 February and 17 May respectively).

Before the war all students were familiar with the various prizes, the type of work or competition involved in each, the value of the prize (both in terms of money and prestige) and who were the current winners and schools. The following notes will give the present generation of students a broad picture of the system. They are no substitute for careful study of the Prizes and Studentships pamphlet (from the R.I.B.A.) which every potential entrant should study carefully. The conditions vary somewhat, some prizes being open to qualified architects, others to those partly qualified, and some to unqualified persons; again, some are restricted to entrants of British nationality. These conditions were laid down in the original bequests which established individual prizes.

The obtaining of a prize is a "hallmark" which is of considerable prestige value to the young architect. For instance, the *Hunt Bursary* indicates special knowledge of town planning; the *Henry Saxon Snell Prize* and *Theakston Bequest* special knowledge of the design and construction of hospitals; the *Grissell prizeman* is recognised as an expert on structures; the winner of the *Owen Jones Studentship* is known to be skilled in colour decoration. These distinctions carry weight when winners of them apply for appointments in after life.

Some of the prizes and studentships are offered in alternate years, according to the funds available from a particular bequest. The Board of Architectural Education has arranged that these shall run "in parallel" so far as possible; for instance, the *Victory Scholarship* alternates with the *Soane Medallion*. Both are equal in value and both are for design.

The following are offered for competition in 1946 :-

The Tite Prize. A certificate and £35. The junior prize for design and the most popular. Usually attracts from 200 to 250 entries. Open to those of Intermediate Standard in the Empire.

The Victory Scholarship. Silver medal and £120. The senior prize for design, alternating with the *Soane Medallion*. Open to those of Final standard in the Empire.

R.I.B.A. Alfred Bosson Research Fellowships. For post-graduate research. Grants are made for specific investigations on architectural subjects. The value of individual Fellowships is decided by the Selection Committee. Open to members of R.I.B.A. only. This scheme is new and a complete revision of the pre-war Bosson Studentships. No competition: merely application to the Secretary R.I.B.A.

The Ashpitel Prize. £20 in books for the best candidate in the External Final Examination.

The Arthur Cates Prize. £100 (an increase of £25 from pre-war). Open to those who have passed the Final in one examination or hold the diploma of a recognised school. Drawings to be submitted of studies "for the promotion of architecture, more especially in relation to geometry of vaulting, stability of edifice and design, coupled with actual measurement and delineation, both geometrical and pictorial of appropriate examples."

The Hunt Bursary. £75 (an increase of £15). Open to R.I.B.A. members who have passed the Final and are 21 years of age. Entrants must apply and submit evidence in the form of notes, studies and testimonials, together with a programme of study. The winner makes a tour of three weeks and afterwards submits a thesis.

The Neale Bursary. £100 (an increase of £25), for study of historical architecture. Entrants must apply and submit evidence in the form of drawings, sketches and testimonials, together with a programme of travel and study. The winner makes a tour of four weeks and submits a thesis. Open to members who have passed the Final and are 21 years of age.

The Measured Drawings Prize. Silver medal and £75. Open to any member of the profession, of any nationality. Entrants to submit drawings and original plottings.

The Athens Bursary. £125. Open only to the teaching staff of recognised schools of architecture. Four weeks' travel in Greece, including residence at the British School at Athens. Application only.

The Owen Jones Studentship. Certificate and £100. R.I.B.A. members of Final standard. No set subject for competition.

Entrants to submit studies of colour design. Eight weeks' tour, after which drawings to be submitted.

The R.I.B.A. Silver Medal for an Essay. Medal and £50. Open to members of the R.I.B.A. who have passed the Final. Can be on any architectural subject. A synopsis must be submitted for approval by the jury. The essay should be illustrated by drawings or photographs.

The Banister Fletcher Essay Prize. Silver Medal and £26 5s. Open to probationers and elected students of the R.I.B.A. This year's subject is "Terrace and Square in the English Tradition." Length 3,000 words plus illustrations.

R.I.B.A. Prizes for Public and Secondary Schools. Totalling 10 guineas. For best original essay or sketches or drawings.

The R.I.B.A. Prize for Art Schools and Technical Institutions. £5 in books. Each school nominates one student and the Principal submits a portfolio of his work.

The following prizes and studentships will be among those to be offered next year :- *The Henry Saxon Snell Prize and Theakston Bequest, The Florence Bursary, The Soane Medallion, The Godwin and Wimperi Bursary, The Grissell Gold Medal, The Pugin Studentship.*

NORTHERN ARCHITECTURAL ASSOCIATION

At the January meeting of the Northern Architectural Association, held at King's College, Newcastle-on-Tyne, at which Mr. Norman Mackellar [F.], Past President, presided, a lecture on *The Effect of Daylight on Building Development and Civic Planning* was given by Mr. John Swarbrick.

The lecturer referred to the beneficial properties of daylight and sunlight and to various methods of protecting daylight, by legislation, bye-laws, regulations and zoning. Attention was also called to the measuring grids used for this purpose in Hamburg. The limitations of zoning in this respect were explained, the fortuitous effects to protect the enjoyment of daylight in this way in the United States being cited. Tribute was paid to the influence of Sir Raymond Unwin, Le Corbusier, Walter Gropius and Thomas Adams, the editor of the "Regional Survey of New York and its Environs."

Mr. Swarbrick described the invention of the skyscraper in 1884, and the facilities it afforded for congested vertical development, the consequences of which upon natural illumination were illustrated by photographs and diagrams. He also showed how high buildings had been erected, without adequate control, so closely as to mutually depreciate rental and capital values. This he stated had been the cause of grave anxiety expressed in the report of the Committee of Enquiry published in New York in 1916. He read some of the amazing admissions of the disastrous results of uncontrolled development. As a result, a system of zoning was adopted which was officially stated in a Report of November 1944 to have proved a failure. Typical quotations from both reports were read by the lecturer. The latest recommendations made by the present Committee of Enquiry were explained by means of the drawings officially published.

Particulars were given of some of the fabulous sums paid by wealthy corporations, for the purpose of preventing interference with the natural illumination now enjoyed by some of the largest skyscrapers. Since the case of *Parker v. Foote* was heard in the State of New York in 1838, daylight has been one of the few essential amenities of which an owner of land there might deprive his neighbours without having to pay compensation. A sum of £148,500 paid to protect part of the daylight of the Harriman building in Broadway, was described in the American press at the time as payment for "the most expensive air in the world." Such sums could not be paid by most private building owners, who not only had no remedy at law, but also no means of protecting their property from depreciation. Those who suffered were not, however, merely the owners of buildings; the occupants of them, who are alluded to in the 1944 Report as "the millions of inarticulate citizens," also suffered both physically and mentally, as the Committee of Enquiry admitted.

In conclusion, Mr. Swarbrick alluded to the efforts of reformers, who were endeavouring to ensure the provision of more satisfactory conditions in the future, and concluded by quoting an American publication: "It is not beyond the range of possibilities that laws similar to the English Law of Ancient Lights may come into vogue in the United States some day."

A vote of thanks, moved by Major G. H. Gray, and seconded by Mr. J. C. Smith, was accorded to the lecturer.

COMMITTEE ON REGENCY HOUSES

The Prime Minister has appointed a Committee to "Consider the future of the terraces adjoining Regent's Park from all aspects, architectural, town planning and financial, and to make recommendations as to their future adaptation, or replacement, to meet modern requirements." The members of the Committee are Lord Gorrell (Chairman), Mrs. I. M. Bolton, chairman of the L.C.C. Town Planning Committee; Sir Edward Forbes, chairman of the Board of Inland Revenue 1934-38; Mr. J. H. Forshaw [F.], Chief Architect, the Ministry of Health; Sir Eric MacLagan [Hon. A.], chairman of the National Buildings Record; Sir Drummond Shiels, formerly Under-Secretary for India and for the Colonies; Mr. J. A. F. Watson, chartered surveyor.

R.I.B.A. EXAMINATIONS

THE FINAL EXAMINATION, DECEMBER 1945

The Final Examination was held in London, Edinburgh and Belfast from 5 to 13 December 1945.

Of the 68 candidates examined, 60 passed as follows:—

Passed Whole Examination	32
Passed Whole Examination subject to approval of Thesis	11
Passed Whole Examination subject to approval of remaining Testimonies of Study and Thesis	4
Passed Part I only	11
Passed Part I only subject to approval of remaining Testimonies of Study	1
Passed Part II only subject to approval of remaining Testimonies of Study and Thesis	1
	<hr/> 60

28 candidates were relegated.

The successful candidates are as follows:—

WHOLE EXAMINATION

Ball, William K.	napton, Alan D. (Subject to approval of Thesis)
Barlow, Leonard R. (Subject to approval of Thesis).	Lane, Ronald J.
Bickerdike, John B. (Distinction in Thesis)	McDowall, Bessie (Miss)
Bundy, Kenneth D.	Mellor, Raymond W.
Campbell, H. V. Noel	Nicol, John
Clark, Connie (Miss)	Parnes, Helen (Mrs.)
Clark, Reginald W. (Subject to approval of Thesis)	Parsons, Anthony L.
Clink, Stuart	Patterson, Dennis. (Subject to approval of remaining Testimonies of Study and Thesis)
Cooper, Raymond	Peachey, Norman A.
Craven, Edward	Radford, Hedley G. (Subject to approval of Thesis)
Crawford, Ernest L. (Subject to approval of Thesis)	Reid, Kenneth C. (Subject to approval of Thesis)
Cuzens, Gerald J. (Subject to approval of Thesis)	Samarasekera, A. J. V. de Z.
Dod, Kenneth L. (Subject to approval of Thesis)	Samson, William R. (Subject to approval of remaining Testimonies of Study and Thesis)
Downie, Margaret N. (Mrs.) (Distinction in Thesis)	Sawday, John T. (Distinction in Thesis)
Flury, Barry R. (Subject to approval of Testimonies of Study and Thesis)	Simpson, John W.
Frith, Norman L.	Sykes, Frederick O. (Subject to approval of Thesis)
Graham, Robert M. (Subject to approval of remaining Testimonies of Study and Thesis)	Taylor, Alexander B.
Gray, Percy	Tyler, Richard M. T. (Subject to approval of Thesis)
Hatton, John S.	Unsworth, Herbert
Hoskins, George R. S. (Distinction in Thesis)	Urquhart, William J.
Howles, Leslie A.	Watson, Clarence L.
Huggett, Bernard W. (Distinction in Thesis)	Waugh, Eric. (Subject to approval of Thesis)
Kennedy, Charles V. K.	White, F. Silvester
	Wilkie, Alexander A.

PART I ONLY

Bantin, Charles E.	Pearson, Gerald M.
Collier, Harold J.	Phillips, Leonard W. C.
Fenwick, Hubert W. W.	Tranter, James H.
Fordham, George R.	Whitelaw, Alexander R. (Subject to approval of Testimonies of Study)
Hughes, Hubert J.	Woodford, Charles A.
Lewis, Wilfred S.	
Nibbs, Margaret (Miss)	

PART II ONLY

Vine, Sidney F. (Subject to approval of remaining Testimonies of Study and Thesis).	
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THE SPECIAL FINAL EXAMINATION, DECEMBER 1945

The Special Final Examination was held in London, Edinburgh and Belfast from 5 to 12 December 1945.

Of the 57 candidates examined, 36 (8 in Part I only, 2 in Part II only) passed as follows:—

WHOLE EXAMINATION

Armstrong, Donald F.
Barr, Thomas
Batley, Wilfred P.
Bell, John T.
Bruce, Albert H.
Bullen, Henry W.
Bulmer, Arthur H.
Cottrill, Allan
Davidson, John W.
Farrow, William R. J.
Giles, Frank A.
Gill, William H.
Hall, Dudley R.

Hartley, Harold
Hodgson, Albert
Jenner, Herbert E.
Jones, Cyril A.
Jones, Frederick W.
Leyshon, Sydney
Ramsbottom, Roy
Reed, Richard E.
Shelton, Joseph T.
Stott, Leslie G.
Sutton, Hugh A.
White, R. Barton
Wylde, John H.

PART I ONLY

Brown, James
Dolman, Mowbray
Evans, William G. S.
Green, Bernard W.

Grinshpon, Avshalom
Hague, John A.
Wakefield, William
Wallasz, Rudolf

PART II ONLY

Dean, Robert S.

Jennings, Gordon S.

21 candidates were relegated.

THE EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF SCHOOLS OF ARCHITECTURE RECOGNISED FOR EXEMPTION FROM THE R.I.B.A. FINAL EXAMINATION

The Examination was held in London and Edinburgh on 11 and 13 December 1945. Five candidates were examined and passed as follows:—

Allingham, Patric H. L.	Masson, John
Bryan-Brown, Beatrice G. (Miss)	Sutherland, Robert
Herne, Ivor A. C.	

Competitions

COMPETITION FOR LAYOUT AND REPLANNING OF THE CRYSTAL PALACE

The Trustees of the Crystal Palace and the Council for the Encouragement of Music and the Arts (C.E.M.A.) invite architects and town-planners to submit designs for the layout of the new Crystal Palace and its surroundings.

Assessors: Prof. Sir Patrick Abercrombie [F.]

Dr. Charles Holden [F.]

Mr. Alister MacDonald [F.]

Sir Kenneth Clark, K.B.E.

Mr. Lewis Silkin, M.P.

Premiums: £2,000, £750, £500, and a further sum of £500 may be awarded at the discretion of the Assessors.

Last day for submitting designs: 6 April 1946.

Conditions of the competition may be obtained on application to the General Manager, Crystal Palace, London, S.E.19. Deposit one guinea.

WESTMINSTER: COMPETITION FOR WORKING-CLASS FLATS.

The Westminster City Council invite architects to submit in competition designs for the layout of about 31 acres in Westminster, and for the design of flats to be erected thereon.

Assessor: Mr. Stanley C. Ramsey [F.]

Premiums: 700 guineas, 500 guineas, 300 guineas and 200 guineas.

Last day for submitting designs: 30 April 1946.

It is the intention of the Promoters to proceed forthwith with the erection of the buildings on one section of the area covering about 8 acres and subject to the Conditions of the Competition to employ for that purpose the author of the winning design at fees calculated in accordance with the R.I.B.A. scale of architects' fees for State-aided multi-storey flats.

Conditions of the competition may be obtained on application to Sir Parker Morris, LL.B., Town Clerk, Westminster City Hall, Charing Cross Road, W.C.2.

Deposit, 3 guineas.

Notices

VICTORY (EX-SERVICES) CLUB APPEAL

An influential committee representing all sections of British industry has launched an appeal for funds to build a social, cultural and welfare centre in London for ex-service men and women. It is to be industry's war memorial to the fallen. The scheme is supported by the Prime Minister, Mr. Churchill, Field-Marshal Montgomery, Air Chief-Marshal Tedder and other senior officers of the Services. The proposed building will contain welfare and advice bureaux, lounges, reading and writing rooms, a restaurant and several hundred bedrooms. Each section of industry has its own appeal committee, the president of the Building Trade Appeal being Sir George Burt. The committee point out that if you sign a covenant to pay to a charity a certain sum each year for seven years, the charity actually gets double the amount while, if you pay surtax you actually benefit because the Government will refund the full amount of surtax chargeable on the amount of the contribution to you. Donations should be sent to the Treasurer, Victory (Ex-Services) Club Appeal Fund and may be paid into any branch of the Westminster Bank. Enquiries should be made to M. A. Browning, 15 King Street, S.W.1.

NOTES ON PRESENT-DAY PRACTICE AND PROCEDURE

Mr. Charles Woodward [L.] has prepared for the use of returning service members a series of notes on present-day building practice and procedure. They explain the system of licences and regulations which to-day govern practice and which are strange to members trained in pre-war methods. The notes are issued free on application to members of the R.I.B.A. They will be revised from time to time; notice of revisions will be given in the JOURNAL; members wanting revised copies should ask for them because present staff limitations do not permit an undertaking to send out revision sheets unless they are asked for. Non-members can obtain the notes at a cost of 1s.

BUILDING SURVEYING EXAMINATION

The R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 1, 2 and 3 May 1946. Applications for admission to the examination must be received not later than 15 March 1946.

ANNUAL SUBSCRIPTIONS

Members' subscriptions, Students' and Subscribers' contributions became due on 1 January 1946.

The amounts are as follows:—

Fellows	£5 5 0
Associates	£3 3 0
Licentiates	£3 3 0
Students	£1 1 0
Subscribers	£1 1 0

NOTE.—By a resolution of the Council dated 20 July 1931 the subscriptions of R.I.B.A. members in the transoceanic Dominions who are also members of Allied Societies in those Dominions are reduced to the following amounts as from 1 January 1932:—

Fellows	£3 3 0
Associates	£2 2 0
Licentiates	£2 2 0

Members who are already registered under the Architects' Registration Act 1931 are reminded that the annual renewal fee of £1 became due on 1 January 1946, and should be forwarded DIRECT to the Registrar, The Architects' Registration Council, 68 Portland Place, W.1.

COMPOSITION OF SUBSCRIPTIONS FOR LIFE MEMBERSHIP

Fellows, Associates and Licentiates of the Royal Institute may become Life Members by compounding their respective annual subscriptions on the following basis:—

For a Fellow by a payment of £73 10s. (70 guineas).

For an Associate or Licentiate by a payment of £44 2s. (42 guineas), with a further payment of £29 8s. (28 guineas) on being admitted as a Fellow.

In the case of members in the transoceanic Dominions who are members of Allied Societies in those Dominions, the following basis will operate:—

For a Fellow by a payment of £52 10s. (50 guineas).

For an Associate or Licentiate by a payment of £31 10s. (30 guineas), with a further payment of £21 (20 guineas) on being admitted as a Fellow.

Provided always that in the case of a Fellow or Associate the above compositions are to be reduced by £1 1s. per annum for every completed year of membership of the Royal Institute after the first five years, and in the case of a Licentiate by £1 1s. per annum for every completed year of membership of the Royal Institute, with a minimum composition of £6 6s. in the case of Fellows and £4 4s. in the case of Associates and Licentiates.

ARCHITECTURAL SCIENCE BOARD LECTURE

"COLOUR IN BUILDINGS," by WILLIAM ALLEN, B.Arch. [L.]

Wednesday, 3 April, 1946, at 5.45 p.m.

Recent papers arranged by the A.S.B. have discussed painting, plastering and painting on plaster. The present paper attempts an objective study of colour as used by the designer.

Three main lines of approach in present-day colour practice are noted:

1. The light-coloured environment.
2. The use of more striking colours.
3. Utilitarian uses of colour.

It is noted that the first two of these have been successively advocated among building designers while the third—largely a matter of colour infatuations at present—has most of its current inspiration in science.

All three are examined, particularly to see why they have been advocated, and to discover what scientific evidence can be found on which to base criticism. This is shown to consist mainly of the following:

1. The nature of the visual reaction to different forms of brightness-contrast.
2. The effect of recession and of camouflage.
3. The nature of what we call "texture" or "richness," and its importance as a principle of decoration.

The effect of colour on the morale of operatives in factories is mentioned, and some questions are raised about future practice in factory colouring.

To develop the discussions, copies of the lectures may be obtained two weeks before they are due to be delivered on application to the R.I.B.A. Editor, 66, Portland Place, W.1.

CONFERENCE ON THE GREATER LONDON PLAN

The Town and Country Planning Association is to hold a conference at the Conway Hall, Red Lion Square, W.C.1, on 7 March from 2.30 p.m. to 9.45 p.m. The programme is as follows:—

Session 1. 2.30 p.m. *London's Chance: Can London take it?* Speaker: Mr. F. J. Osborn, Member of Lord Reith's New Towns Committee. 4.15 p.m. Tea.

Session 2. 5.00 p.m. *Can the Plan be Implemented?* Speaker: Mr. H. W. Wells, F.S.I., F.A.I., Chief Estate Officer, Ministry of Town and Country Planning. 6.45 p.m. Break.

Session 3. 8.00 p.m. *Relocation of Industry and People.* Speaker: Mr. J. F. Eccles, O.B.E., Director, Twynyn Garden City, Ltd.

Tickets: 5s. each to Members of Town and Country Planning Association; 7s. 6d. to non-members. Obtainable from the Planning Centre, 28 King Street, Covent Garden, W.C.2. (Temple Bar 5006-7-7).

R.I.B.A. SCALE OF PROFESSIONAL CHARGES

At their meeting on 15 January 1946 the Council ratified their decision taken at the meeting held on 16 October 1945 to revise Clause 7 of the Scale of Professional Charges, by the substitution of the word "seven" for the word "five." The Clause now reads:—

7. *Time Charges.*

In cases in which charges are based upon time occupied the minimum fee is seven guineas per day exclusive of charges for Assistant's time.

LECTURE ON SOLID FUEL APPLIANCES

On Thursday, 14 March, at 5.30 p.m. (tea 5 p.m.), at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, London, W.C.2, the Installations Section are holding a meeting at which a paper will be read entitled *Engineering Principles Applied to the Design of Domestic Water-heating Installations of the Solid-Fuel-Electric Type* by R. Grierson and Forbes Jackson.

Advanced copies of the lecture may be obtained early in March from the Secretary, Installations Section, The Institution of Electrical Engineers.

LEVERHULME RESEARCH FELLOWSHIPS 1946

Application is invited for Fellowships and Grants in aid of research. The Fellowships and Grants are intended for senior workers who are prevented by routine duties or pressure of other work from carrying out research. They are limited to British-born subjects normally resident in Great Britain. In exceptional circumstances the Trustees may waive the condition as to residence.

The Trustees are also prepared to consider applications from groups of workers engaged upon co-operative programmes of research, particularly from those engaged upon long-distance programmes or in institutions in which the normal facilities for research have been curtailed by the war. The duration of the awards will not normally extend over more than two years or less than three months and the amount will depend on the nature of the research and the circumstances of the applicant.

Forms of application may be obtained from the Secretary, Dr. L. Haden Guest, M.C., M.P., Leverhulme Research Fellowships, 7 Bedford Row, London, W.C.1. Applications must be received on or before 1 March 1946. Awards will be announced in July and will date from 1 September 1946.

Membership Lists

ELECTION: 15 JANUARY 1946

The following candidates for membership were elected on 15 January 1946:—

AS FELLOWS (8)

BOCHANAN: JAMES WARDROP (Sqdn./Ldr., R.A.F.) [A. 1929].
GARDNER: ALFRED HERBERT [A. 1927], Coventry.
HUME: BERTRAM STEWART (Major R.E.) [A. 1925].
KEMP: CECIL GEORGE [A. 1926].
OSBORNE: FRANK JOHN, M.C. [A. 1908], Birmingham.
PRINGLE: GORDON, M.B.E., M.A. [A. 1926].
READ: GEOFFREY ERNEST [A. 1925].
WISE: ARTHUR GEORGE, Dip.Arch.Lond. [A. 1933], Launceston.

AS ASSOCIATES (51)

ADLER: CYRIL.
ARUNDEL: KENNETH, Leeds.
BANKS: GERALD GRIMSHAW, Dip.Arch.(Dist.)L'pool, Southport.
BARNES: ALFRED STANLEY, Liverpool.
BARON: MRS. MARGARET, Lancaster.
BAY: PETER LAURITZ HANSEN, B.A.(Arch.)Cantab.
BELL: MARSHALL, Chester-le-Street.
BEVAN: JOHN JAMES.
BIRD: CHARLES LEONARD.
BONE: JOHN BOLAM, Tynemouth.
CRISP: ALAN RUSSELL, Nottingham.
CUTMORE: WILLIAM HENRY.
DAVISON: THOMAS JAMES MAURICE, Belfast.
ELLIOTT: EDWARD GRAHAM.
FERGUSON: BRIAN.
FITT: MISS PAMELA MURIEL, B.Arch.
GOODACHE: DAVID MEAKIN, Nottingham.
GRAY: JOSEPH, Durham.
GREED: JOHN KENNETH.
HAZELL: JOHN LAWRENCE, Yeovil.
HUTCHINGS: STANLEY, Truro.
JACK: WILLIAM, JR., Anstruther.
JACKSON: DAVID WATSON, Glasgow.
JACOB: CHARLES EDWARD, Southampton.
JOHNSTON: CECIL, Belfast.
KELLY: GERARD AUGUSTINE, Downpatrick, Co. Down.
LE CLERC: WILLIAM PERCIVAL, Blackrock, Co. Dublin.
LE SUEUR: ALBERT, St. Helier, Jersey.
MCGAVIN: JAMES STEWART, Bridgend, Perth.
MACLYNN: CORMAC THOMAS, Belfast.
MELLAND: GUY SEYMOUR, Birmingham.
MILLS: WILFRED EDGAR.
MITCHELL: JOSEPH EDWIN.
MOON: ARTHUR LESLIE.
MOON: CHARLES PETER, Derby.
NEILL: ALBERT, Belfast.
PHILLIPS: CHARLES JOHN.
ROBERTS: JAMES ARTHUR, Birmingham.
ROWBOTHAM: JEFFREY, Glasgow.
SANGER: HAROLD, Oldham.
SKEATS: GEORGE EDWARD.
SMITH: HENRY PERCY.
STANTIALLE: HAROLD JOSEPH GEORGE.
STARRETT: NORMAN, B.Arch.(Hons.)L'pool, Liverpool.
STATHAM: STEPHEN HAYWOOD.
VIGOUR: IVOR JOHN JAMES.
WADE: ERNEST.
WHITE: WALTER DOUGLAS.
WRIGLEY: DEREK FULLER, Oldham.
YARD: GILBERT HARRY, Taunton.
YARWOOD: GEORGE, Stafford.

AS LICENTIATES (12)

ALEXANDER: WILLIAM.
BARKER: JOHN GREGORY, Derby.
CHURCHILL: OLIVER WILLIAM, Cambridge.
MCGANN: JOSEPH PAUL, Birmingham.
MITCHELL: GEORGE WILLIAM, Leeds.
OAKES: ARTHUR SYDNEY, Warwick.
PATERSON: JAMES STRATTON, Dundee.
PEARSON: RALPH HENRY.
STEWART: WILLIAM ALEXANDER, Bournemouth.
VAN RAAT: ALFONSO CHRISTIAAN.
WARWICK: PHILIP HENRY, M.T.P.I., Winchester.
WILKINS: FREDERICK ERNEST.

ELECTION: 12 MARCH 1946

An election of candidates for membership will take place on 12 March 1946. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday, 9 March 1946.

The names following the applicant's address are those of his proposers.

AS HON. FELLOW (1)

CANTERBURY: THE MOST REV. AND RT. HON. THE ARCHBISHOP OF, P.C., D.D., Lambeth Palace, S.E.1. Proposed by the Council.

AS FELLOWS (13)

AMBROSE: ERIC SAMUEL [A. 1933], 57 Long Acre, W.C.1; 30 Bisham Gardens, Highgate, N.6. Prof. A. E. Richardson, Prof. H. O. Corfiato and Guy Church.
BRIGGS: ALAN ARTHUR [A. 1938], 15 Curzon Street, W.1; Roefield, Felden Lane, Boxmoor, Herts. W. H. Hamlyn, J. H. Pearson and Harry Holland.
ERITH: RAYMOND CHARLES [A. 1927], Dedham House, Dedham, Colchester. V. O. Rees, Howard Robertson and J. M. Easton.
KNIGHT: CYRIL ATLEE [A. 1932], formerly Messrs. Davies & Knight, 26 Langham Street, W.1; 43 Eton Court, Eton Avenue, N.W.3. Prof. A. E. Richardson, L. S. Stanley and Prof. H. O. Corfiato.
MORRIS: RONALD STANLEY [A. 1931], 1a Beaumont Street, W.1. Prof. A. E. Richardson, Alister MacDonald and Prof. H. O. Corfiato.
NIGHTINGALE: DOUGLAS ERIC [A. 1930], 107a Queensway, W.2. B. W. Stuttle, C. L. Gill and W. F. B. Lovett.
PLAYNE: EDWARD, D.S.C., A.A.Dip. [A. 1930], 19 Queen Anne's Gate, S.W.1; 29 Queen's Gate Mews, S.W.7. C. M. O. Scott, A. S. G. Butler and S. R. Pierce.
SARTAIN: SIDNEY PHILIP (Lieut.-Col., R.E.) [A. 1931], formerly c/o The Gas Light & Coke Co., Westminster, S.W.1; "Little Manor," The Glade, Kingswood, Surrey. C. W. Box, M. S. Briggs and F. E. Jones.
VEY: GEORGE [A. 1909], Imperial War Graves Commission, Wooburn House, Wooburn Green, near High Wycombe, Bucks; 30 Howard Road, Coulsdon, Surrey. The late H. V. Ashley, F. W. Newman and Hubert Worthington.
WALMSLEY: WILLIAM GEORGE [A. 1933], County Architect's Department, County Offices, Preston; Gillow Heath, Grimsargh, Preston. S. Wilkinson, F. N. Pinder and A. T. Nicholson.
WOOD: JAMES DOUGLAS [A. 1934], 1 Old Burlington Street, W.1; Portholes, Ottershaw, Surrey. C. H. James, F. M. Harvey and Douglas Wood.
And the following Licentiate who has passed the qualifying Examination:—
PAUL: HENRY, Architect's Office, Witley Court, Witley, Surrey; "Woodcote," New Road, Wormley, Surrey. Applying for nomination by the Council under Bye-law 3 (d).
And the following Licentiate who is qualified under Section IV, Clause 4 (C) (ii) of the Supplemental Charter of 1925:—
SMITH: THOMAS EDGAR, Clive Chambers, 121 Queen Street, Cardiff; Quedgeley, Cyncoed Road, Cardiff. Harry Teather, T. A. Lloyd and C. F. Jones.

AS ASSOCIATES (4)

The name of a school or schools after a candidate's name indicates the passing of a recognised course.

AGASCAR: RAYMOND ANAND [Univ. of Sheffield], Woodleigh, Dolcliffe Road, Mexborough, Yorks. Stephen Welsh, H. B. Leighton and Frank Richardson.
DUNKERLEY: MISS MABEL JOAN [Leeds Sch. of Arch.], 99 Stockton Lane, York. C. W. C. Needham, F. L. Charlton and G. H. Foggitt.

KEITH: GEORGE MCINTOSH [Final], Fairlawn Cottage, Ferndale Road, Burgess Hill, Sussex. C. D. Andrews, H. W. Burchett and G. L. D. Hall.

MELLON: KENNETH [The Poly., Regent Street, London], 994 St. Albans Road, Watford, Herts. E. C. Scherrer, J. K. Hicks and L. A. Chackett.

AS LICENTIATES (22)

BUCKLEY: REGINALD FRANCIS, formerly c/o Messrs. Naylor, Sale & Widdows, St. Mary's Chambers, St. Mary's Gate, Derby; 20 Kensington Road, Blackpool, Lancs. C. F. W. Haseldine and the President and Hon. Sec. of the Nottingham, Derby and Lincoln Arch. Soc. under Bye-law 3 (a).

CARPENTER: RONALD DUDLEY, c/o Architectural Department, War Office, S.W.1; 160 Ennismore Gardens, East Molesey, Surrey. Applying for nomination by the Council under Bye-law 3 (d).

CLAYTON: ALLAN SEYMOUR, Office of the Chief Engineer, Western Command Headquarters, Queen's Park, Chester; 35 Rullerton Road, Wallasey, Cheshire. Prof. L. B. Budden, F. X. Velarde and T. M. Alexander.

COOKSON: THOMAS STANLEY, c/o County Architect's Department, County Offices, Welshpool, Montgomery; 42 Erw Wen, Welshpool. H. Carr, J. H. Haughan and A. G. Chant.

ELSON: LIONEL BOB, c/o The Ministry of Fuel and Power, Nottingham; 21 Haywood Road, Mapperley, Nottingham. H. H. Dawson and the President and Hon. Sec. of the Nottingham, Derby and Lincoln Arch. Soc. under Bye-law 3 (a).

GERRISH: HERBERT VICTOR, c/o The Ministry of Works, St. David's Hill, Exeter; 27 Clifton Hill, Exeter. R. C. James, G. D. G. Hake and E. H. Button.

GREEN: NORMAN, c/o Ealing Borough Council Offices, Ealing, W.5; 2 Leasway, Westcliff-on-Sea, Essex. N. Martin Kay, P. G. Hayward and P. R. Fincher.

HALSEY: REX MARTINDALE, c/o C. W. Richardson, Esq., 52 High Street, Rickmansworth, Herts; "On the Green," Bois Lane, Chesham Bois, Bucks. Applying for nomination by the Council under Bye-law 3 (d).

HANCOX: RONALD ERNEST, 10 Oxford Road, West Bromwich, Staffs. C. E. M. Fillmore and the President and Hon. Sec. of the Birmingham and Five Counties A.A. under Bye-law 3 (a).

HINDLEY: WILFRED, c/o Messrs. Anthony Steel & Owen, Cogan Chambers, Bowlalley Lane, Hull; 6 Flamborough Road, Bridlington, E. Yorks. Applying for nomination by the Council under Bye-law 3 (d).

LOVELOCK: ERIC LESLIE, Architect's Department L.C.C. County Hall, S.E.1; 53, Winsford Gardens, Westcliff-on-Sea, Essex. J. W. Hepburn, R. Wilson and Edwin Williams.

MERCER: WALTER SIDNEY, Borough Hall, Godalming, Surrey; c/o The Mount, Busbridge Lane, Godalming. H. C. Fread, F. G. A. Hall and P. W. Hubbard.

MILLER: HAROLD CARMICHAEL, formerly with Messrs. Smart, Stewart & Mitchell, 40 Tay Street, Perth; The Grove, Craigie, Perth. R. M. Mitchell, G. C. Young and W. E. Thomson.

MURRAY: DONALD, 27 School Wynd, Paisley; 59 Southwold Road, Ralston, Renfrewshire. J. S. Maitland, H. Cook and applying for nomination by the Council under Bye-law 3 (d).

OWEN: RICHARD, c/o Drawing Office, Messrs. F. W. Woolworth & Co., Ltd., Martin's Bank Building, Water Street, Liverpool; 69 Gilroy Road, Liverpool, 6. H. E. Davies and applying for nomination by the Council under Bye-law 3 (d).

PARKER: CHARLES ERNEST, 51 Highfield Road, Sutton, Surrey. T. H. Birks and applying for nomination by the Council under Bye-law 3 (d).

PIAZZA: CHARLES ACHILLES, 33a Central Parade, High Road, Wembley, Middlesex; 7 Fernleigh Court, North Wembley. F. B. Nightingale, S. E. Dykes Bower and A. G. Shoosmith.

RUSSELL: VERNON FLETCHER (Capt. R.E.), 189 Tulse Hill, S.W.2. E. G. W. Souster, A. H. Ley and Michael Tapper.

STEANE: PATRICK FRANCIS MAUDE, c/o Ministry of Town and Country Planning, 32 St. James's Square, S.W.1; 64a Warwick Avenue, Maida Vale, W.9. Gordon Stephenson, S. L. G. Beaufoy and A. R. F. Anderson.

TENISON-COLLINS: MAX EDWARD, Camden House, Moor Park Road, Northwood, Middlesex. Applying for nomination by the Council under Bye-law 3 (d).

TRAVIS: FREDERICK JOHN HENRY, Messrs. White & Travis, 26 Portugal Street, W.C.2; 234 Salmon Street, Kingsbury, N.W.9. E. G. Culpin and applying for nomination by the Council under Bye-law 3 (d).

WESTON: CLAUDE FREDERICK, c/o Messrs. Carnell & White, Paradise Chambers, King's Lynn; 20 Bevis Way, Gaywood, King's Lynn. H. Anderson, H. C. Ashenden and R. F. Bargman.

ELECTION: 25 JUNE 1946

An election of candidates for membership will take place on 25 June 1946. The names and addresses of the overseas candidates with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Saturday, 25 May 1946.

AS FELLOWS (3)

DESAI: MORESHWAR GANPATRAO, B.A., Dip. Arch. (Lond.) [A. 1936], Consulting Architect to the Government of Madras, P.W.D. Chepauk, Madras; "Amba Vilas," Lalitnagar, Sonthome, Madras. M. K. Jadhav, C. M. Master and D. W. Ditchburn.

MOORE: CHARLES EDWARD (Capt., Indian Engineers) [A. 1934], c/o 352 M.U., R.A.F., South-East Asia Command; 27 Walsh Street, Balwyn, E.8, Melbourne, Australia. Prof. L. B. Budden, J. E. Marshall and B. A. Miller.

TEBBUTT: HENRY JEMSON [A. 1920], St. George's Buildings, Hong Kong. C. G. Ripley, Michael Waterhouse and A. F. Hooper.

AS ASSOCIATES (3)

The name of a school or schools after a candidate's name indicates the passing of a recognised course.

GUPTA: CHARUDDATTA SHANKAR [Final], 81 Ghod Bunder Road, Khar, Bombay, India. C. M. Master, D. W. Ditchburn and B. E. Doctor.

MOORHEAD: ERIC WILLIAM, B.Arch. (Melb. Univ.) [Passed a qualifying Exam. approved by the R.A.I.A.], "Biltmore" Hotel, Bridport Street, Albert Park, Melbourne, Australia. L. M. Perrott, R. K. Stevenson and C. E. Serpell.

SATHE: GOVIND GOPAL [Final], Sathe's Wada, Nr. Bhaji Market, Kalyan, Dist. Thana, India. C. M. Master, D. W. Ditchburn and S. S. Reuben.

MEMBERS SERVING WITH THE FORCES

KILLED

DOBSON, F. C. [A.], Lieut. R.E.

MACPHEE, I. M. [S.], W/O R.A.F.

STEWART, J. H. FRASER [L.], Capt. R.A.

DECORATIONS AND DISTINCTIONS

BALL, W. K. [S.], Q.M.S. R.E. Awarded M.B.E.

BARRETT: WALTER [A.], Lt.-Col. R.E. Awarded M.B.E.

CARTWRIGHT, T. N. [F.], Commander, R.N.V.R., awarded D.S.C. and two bars.

CUSDIS, S. E. T. [A.], Wing Cdr. R.A.F. Awarded O.B.E.

EATON, F. L. [L.], Major. Awarded M.B.E.

HARPER, D. ROSSLYN [A.], F/Lt. R.A.F. Awarded D.F.C. and Greek A.F.C.

SARJEANT, J. K. G. [A.], Capt. R.E. Awarded M.B.E.

WATSON, L. K. [A.], Lt.-Col. R.A. Awarded M.B.E., T.D.

WRIGHT, LAWRENCE [A.], Wing Cdr. R.A.F. Mentioned in Despatches.

MEMBERS FROM JAPANESE P.O.W. CAMPS

Information has been received that the following members have been released from Japanese hands and they are safe and well:—

E. FORBES BOTHWELL [F.]

C. O. JENNINGS [A.]

R. G. PARKER [A.]

MEMBERS' COLUMN

APPOINTMENTS

MR. F. R. STEELE [F.], F.S.I., M.T.P.I., has been appointed County Architect for the West Sussex County Council, as from 1 May 1946. At present Mr. Steele is City Architect, Exeter.

MR. ANTHONY M. CHITTY [F.], A.M.T.P.I., of Messrs. Henning and Chitty, has been appointed Town Planning Consultant to the Metropolitan Borough of Holborn.

MR. JAMES W. GREASY [A.] has been appointed Resident Architect to the Imperial War Graves Commission, Southern European District, and would be pleased to receive trade catalogues, etc., at 48 Via Delle Botteghe Oscure, Rome.

MR. STANLEY F. ASHBY [A.] has been appointed Surveyor to the Baptist Union Corporation, Ltd., the Baptist Church House, 4 Southampton Row, W.C.1 (Holborn 2045), where he will be pleased to receive trade catalogues, etc.

MR. H. L. MULLETT, M.A. [L.], has been appointed Head of the Department of Building of the Wolverhampton and Staffordshire Technical College. His address will be The Technical College, Wulfruma Street, Wolverhampton, where he will be pleased to receive trade catalogues, etc.

PRACTICES AND PARTNERSHIPS

CAROE & PASSMORE. MR. A. D. R. CAROE [F.] and Mr. A. P. ROBINSON [F.] have now resumed control of the practice, which continues at 3 Great College Street, Westminster, S.W.1 (Abbey 6686).

CAPT. JOHN BREAKWELL [A.] is rejoining Scott, Shepherd & Breakwell on release from the Forces and they will practice from The Pond House, Stoke Row, Henley-on-Thames (Checkendon 105), as a temporary address.

CAPT. JOHN M. FOX [A.] has started practice at 200 High Street, Exeter, and will be pleased to receive trade catalogues, etc.

MR. W. DAVID HARTLEY [F.] (late Major, R.E.), together with some of his pre-war staff, announces the reopening of his practice at 14 Mackenzie Street, Slough (Slough 20926). He will be pleased to receive trade catalogues, etc.

MR. W. A. HUNT [L.] has taken into partnership his son, Mr. N. H. Hunt [A.]. The practice will be known as William and Norman Hunt, Colne Road, N.21 (Laburnum 1420). They will be pleased to receive trade catalogues, etc.

MR. F. MAXWELL FRY [F.] and Miss JANE B. DREW [F.] (Mrs. Maxwell Fry) have entered into partnership and will practise from 63 Gloucester Place, Portman Square, W.1.

MR. GERALD G. BANKS, [A.], Dipl. Arch. (Dist.), Livpl. and Mr. NORMAN STARRETT, [A.], B. Arch. (Hons.) Livpl. have entered into partnership under the title of Banks & Starrett, 283 Lord Street, Southport (Southport 56141), and will be pleased to receive trade catalogues, etc.

MR. L. WATSON NUNN [A.], having acquired the practice of Arthur W. Brewill & Son, will practise under the name of Brewill, Son & Nunn, at Armitage Chambers, Victoria Street, Nottingham, and will be pleased to receive trade literature.

An amalgamation has been arranged as from 1 January 1946 between Messrs. Daniel Watney & Sons, Messrs. Eiloart, Son & Inman, and Messrs. T. C. Nunn. The name of the joint firm will be Daniel Watney, Eiloart, Inman & Nunn. Mr. Dendy Watney, P.P.S.I. [L.], former senior partner in the firm of Daniel Watney & Sons, retired on 31 December 1945, but has agreed to act as consultant to the joint firm. Until such time as their permanent offices can be reconditioned following war damage the practice of the joint firm will be continued from their present temporary address at the Charterhouse, Charterhouse Square, London, E.C.1 (Clerkenwell 4414/9).

MR. W. T. MADDICK [L.] has resigned from the Kingsbridge Rural District Council's Department and is commencing practice at 15 Church Street, Kingsbridge, S. Devon, where he would be pleased to receive trade catalogues, etc.

MR. R. MERVYN NOAD [A.] and Mr. A. F. WALLACE [A.] have resumed practice under the title of Noad & Wallace, 147 West Regent Street, Glasgow, C.2 (Douglas 5600). During the war the practice has been carried on by Messrs. John Keppie and Henderson.

MR. ALEXANDER T. MCINDOE (M.T.P.I.) and Miss RONA H. INCH MORRISON [A.] have begun practice at 2 Hill Street, Edinburgh, 2, under the title of McIndoe and Inch Morrison and will be pleased to receive trade catalogues, etc.

MESSRS. BRAVEN & CUBITT [A./L.] and Mr. G. A. CROCKETT [A.] are practising at their new offices, 430 Strand, W.C.2 (Temple Bar 4953).

MESSRS. ANDREWS & WINTON-LEWIS [A.], 37 West Street, Brighton, Sussex, have taken additional offices at 12 City Road, Finsbury Square, E.C.1.

MESSRS. SAM BUNTON [L.], A.R.I.A.S., and Associates, 87 West Regent Street, Glasgow, announce that their London branch is situated at 54 Warwick Square, S.W.1 (Victoria 6020).

MR. E. W. SMITH [A.] and Mr. A. B. ALLOTT [L.] have acquired the practice of Mr. James Totty of 20 Moorgate Street, Rotherham, Mr. Totty having retired from business. The practice will be continued under the style of James Totty & Co. at the same address. They will be pleased to receive trade catalogues, etc.

MR. GUY H. NICHOLLS [L.] has taken into partnership Mr. W. Rowley Hall, B.A. [A.], and the practice is at present being conducted under the title of Nicholls & Hall, Architects and Surveyors, 5 Grosvenor Crescent, Hyde Park Corner, S.W.1 (Sloane 8174). New office accommodation has been taken at 66a Wigmore Street, W.1, and it is anticipated that this will be ready shortly.

MR. LOUIS H. GRAY [L.] has been released from the Ministry of Works and has resumed private practice at "Four Winds," Devenish Road, Sunningdale (Ascot 848), where he will be pleased to receive trade catalogues, etc.

MR. ROBERT O. FOSTER [A.] (late Squadron Leader, R.A.F.V.R.) has entered into partnership with Mr. R. C. Foster, M.B.E., M.C. [F.], and they are practising under the title of Tooley & Foster, Midland Bank Chambers, Buckhurst Hill, Essex.

MR. WILFRED H. LOTT [L.] having resigned his position of architect

with the Gas Light and Coke Company will now practise from Forge Cottage, Swans Brook, Horem, Sussex.

MR. H. J. POWELL [A.] has entered into partnership with Mr. E. L. G. Scriven [L.] and they are practising at Cathedral Chambers, King Street, Hereford (Hereford 2466).

MR. HENRY ELDER [L.], having been released from Government service, has now resumed his practice at 399 Oldham Road, Manchester, 10 (Collyhurst 2736), and will be pleased to receive trade catalogues, etc.

MR. GERALD DAVIDSON [A.] is practising at Trevillion, St. Veep, Lostwithiel, Cornwall, and would be pleased to receive trade catalogues, etc.

MR. E. H. SKIPPER [F.], of Messrs. Fred'k W. Skipper & Son, formerly of 55 London Street, Norwich, having been released from Government service, has opened at 4 Theatre Street, Norwich (Norwich 22940), where he will be pleased to receive trade catalogues, etc.

MR. EGERTON W. OWEN [L.] is now practising at 34 Beach Road, Littlehampton, Sussex, where he will be pleased to receive trade catalogues, etc.

MR. GORDON B. BIGGAR [A.] has been taken into partnership by Mr. John Gray, F.R.I.A.S., of Messrs. John Melvin & Son, Mar Street, Alloa (Alloa 53). The practice will continue under the same style and title and at the same address.

MAJOR J. E. HAMMOND [L.] (late R.E.) has resumed his former practice with his father, Mr. J. W. Hammond [L.], 20 North Street, Romford, as from 1 October 1945 and will be pleased to receive trade catalogues, etc.

MAJOR F. L. EATON, M.B.E. [L.], having been released from the Services, has resumed practice at Croft Cottage, Stamford Street, Ashton-under-Lyne (Ashton 1574), where he will be pleased to receive trade catalogues, etc.

MR. JOHN P. GRANT, F.S.A. [F.], and Mr. MAURICE S. GREEN, B.A. [A.], have been released from the Services and are now in partnership under the title of Grant & Green, 10 High Street, Totnes, Devon, where they will be pleased to receive trade catalogues, etc.

MR. G. NORMAN MIDDLETON [A.] has started practice at 71c Widmore Road, Bromley, Kent, where he will be pleased to receive trade catalogues, etc.

MR. FRANK APPLETON [A.] has relinquished his appointment as Deputy Commander Royal Engineers and has commenced practice from the following addresses: 10 High Street, Melton Mowbray (Melton Mowbray, 343) and "Swithland," Kettering Road, Moulton, Northampton (Moulton 2217). Trade catalogues to be sent to the former address.

The partnership previously carried on under the style of Gordon Jackson & Rees [F. and A.] has been dissolved by mutual consent. The practice will be continued at 1 and 2 Gray's Inn Place, W.C.1 (Holborn 9956), as previously, by Mr. T. Gordon Jackson, who is forming a new partnership, particulars of which will be announced later. Mr. Lister P. Rees will continue his appointment as Regional Technical Adviser to the War Damage Commission.

MR. R. K. BRETT [A.], having revived the firm of Fletcher & Brett (E. J. Brett deceased) is practising under the style of R. K. Brett at 1 West Boro, Wimborne, Dorset, where he will be pleased to receive trade catalogues, etc.

COLONEL C. R. B. GODMAN [F.], having retired from practice, Mr. N. F. Gossage [A.], B.A. Cantab., has entered into partnership with Mr. C. J. Kay [F.] and Mr. L. H. Parsons [A.]. The firm will continue to be known as Messrs. Godman & Kay, Bank Chambers, Carfax, Horsham (Horsham 1144).

MR. W. J. PIERRE-HUNT, having been released from his war-time Admiralty employment, has begun practice at The Cottage, Landividdy Lane, Polperro, Cornwall (Polperro 37), where he will be pleased to receive trade catalogues, etc.

MR. DENYS LASDUN, M.B.E. [F.] has entered into partnership with Messrs. Tecton.

MESSRS. HUGH MINTY [F.] and Partners will recommence practice at 14 Bedford Row, W.C.1 (Holborn 0452-3) as soon as repairs to the building are completed. They have also opened offices at 318 London Road, Mitcham. Their office at Yateley, Camberley, will continue to be used for work in Hampshire and Berkshire. They will be glad to receive trade catalogues at all these offices. Mr. Minty has been released from the Royal Engineers.

MR. EDWARD FORSTER [A.] has resumed practice at 9 Stone Buildings, Lincoln's Inn, W.C.2 (Holborn 5508).

MR. ERIC N. SMALLWOOD [L.] has resumed practice at 2 Oaks Crescent, Wolverhampton (Wolverhampton 21178).

MR. H. B. HORNER, G.M. [A.], late Captain, Royal Marines, has resumed practice with his former partner, Mr. Leslie C. Norton, and Mr. H. Brompton, at 16 Clifford Street, W.1 (Regent 5522).

CORRECTION. The new branch office of Messrs. Clayton and Black [F./F.] at 9 and 10 Regent House, London Road, Portsmouth, is being

managed by Captain C. E. Petch. His name was wrongly spelt in the January JOURNAL.

PARTNERSHIPS WANTED AND AVAILABLE

FELLOW with old-established practice in good offices London W.C. district requires partner or would offer share office accommodation during trial period. Apply giving age and brief particulars to Box 202, c/o The Secretary, R.I.B.A.

ASSOCIATE (Lt.-Col., R.E.) just released and with twelve years' experience before the war, specialising in restoration of old houses and cottages and domestic work generally, including housing, desires to purchase partnership in well-established country practice. West country or Welsh borders preferred, but anywhere south-west of a line London-Manchester considered.—Apply Box 200, c/o The Secretary, R.I.B.A.

PARTNERSHIP offered in established practice in the West Country to Associate with experience in rural housing, farms, etc., or in urban houses, factories, churches, etc.—Apply Box 204, c/o The Secretary, R.I.B.A.

ASSOCIATE (35) wants partnership with architect established in practice in Scotland or North of England. Thirteen years' post-graduate experience in planning and construction of schools, hospitals, cinemas, houses, shops, military camps and stores. Returning from overseas in March; serving in R.E. Works Services. Capital available.—Apply Box 203, c/o The Secretary, R.I.B.A.

WELL-KNOWN firm of London architects with large practice and now engaged on high-priority contracts, have vacancy for young energetic architect as junior partner. Service man due for early release considered.—Apply stating full particulars of training, experience and age to Box 197, c/o The Secretary, R.I.B.A.

LADY member [A.], A.M.T.P.I. (26), previously working for Sir Patrick Abercrombie, with some housing work in hand, would like to contact progressive architect or group of architects in London with view to partnership.—Apply Box 205, c/o The Secretary, R.I.B.A.

MEMBER (ex-Major, R.E., age 45), recently demobilised, is re-establishing pre-war practice in London area. Excellent long-term prospects but immediate work of small nature. Wishes to contact member having London office with view to mutual help on reciprocal basis. Willing to discuss partnership. Many years' experience of ecclesiastical work, schools, flats and cinemas.—Apply Box 206, c/o The Secretary, R.I.B.A.

ASSOCIATE (34), just demobilised, seeks responsible position with London architect with a view to partnership. Varied experience in first-class offices. Able to take complete charge of work, interview clients, etc.—Apply Box 196, c/o The Secretary, R.I.B.A.

MAJOR, R.E. [A.] (A.A. Diploma), expects release February or March, employed on Army and R.A.F. construction throughout war service, desires senior position with view to partnership in London area.—Apply Box 195, c/o The Secretary, R.I.B.A.

CAPT., R.E. [A.], anticipates release in March and seeks partnership with well-established firm, West of England preferred.—Apply Box 210, c/o The Secretary, R.I.B.A.

MEMBERS RELEASED FROM THE SERVICES, ETC.

The following members have notified the R.I.B.A. that they have been released from the Services and are resuming practice and would like to receive trade catalogues, information sheets and other data, etc.:

CAPTAIN P. B. ARKCOLL [A.] is joining Mr. F. V. Hulme [L.], District Bank Chambers, Tunstall, Stoke-on-Trent, as Chief Assistant.

MR. L. B. BAILLON [A.] has resumed his work as Architect to the Northampton Brewery Co., Ltd.

MAJOR J. C. T. COLE, R.E., [L.] Central Buildings, Long Lane, Blackheath, Birmingham.

MR. F. D. CRADDOCK [A.] has resumed employment with the County Architect, Middlesex County Council.

MR. R. C. EDELESTON [A.], The Borough Engineer and Surveyor's Office, Architects' Department, Town Hall, Ilford, Essex.

MR. R. D. LAWSON [A.], 3 Herbert Road, Southsea, Hants.

MAJOR W. G. FARMER, R.E. [F.], of Grace & Farmer, 3 and 4 Wardrobe Place, Doctors Commons, E.C.4 (City 1014).

MAJOR B. S. TREVELYAN ARCHER, G.C., R.E. (A.), of Messrs. W. G. Ingram, Son & Archer, 4 Verulam Buildings, Gray's Inn, W.C.1 (Chancery 8036).

CAPTAIN C. GINGELL, R.E. [A.], c/o Borough Surveyor's Office, 3 Gold Street, Kettering.

MR. DAVID W. PYE [A.], 47 Palace Court, W.2.

MAJOR FREDERICK F. CURTIS, R.E. [A.], 48 St. Anthony's Road, Blundellsands, Liverpool, 23.

MR. GEOFFREY COX [A.], 1 Kingscote Road, Edgbaston, Birmingham, 15.

MAJOR G. A. GOLDSTRAW [A.] (Indian Engineers), Government Architect, Jodhpur, Rajputana, India.

MR. ROLF HELLBERG [F.] is resuming practice at 13 Queen Victoria

Road, Coventry (Coventry 2332). He will also be associated with the industrial design firm of Convel Designers, 7 Hobart Place, S.W.1 (Sloane 6127).

MR. R. E. ENTHOVEN [F.], 10 Bayley Street, Bedford Square, W.C.1 (Museum 4211).

MAJOR L. J. DUNN [L.], 10 Lushington Road, Eastbourne.

LIEUT. R. M. V. MESSENGER, R.E. [A.], The Hut, Hillborough Road, Herne Bay, Kent (Herne Bay 833).

LT.-COL. L. K. WATSON, M.B.E., T.D. (R.A.) [A.], The Manor House, West Wycombe, Bucks (West Wycombe 1705).

MAJOR CLIFFORD E. CULPIN, R.E. [F.], 3 Southampton Place, W.C.1.

CAPTAIN ALAN L. BOOTH [A.], 33 Arlow Road, Winchmore Hill, N.11.

MR. G. B. A. WILLIAMS [S.], The Old Vicarage, Ospringe, nr Faversham, Kent.

MR. J. C. P. WEST [L.], 46 Ingleboro Drive, Purley, Surrey.

MESSRS. D. R. HUMPHREYS and R. W. HURST [A.], 100 Gloucester Place, W.1.

CAPT. J. S. A. YOUNG, R.E. [A.], 12 St. Ann's Square, Manchester.

CAPT. G. H. WHILE, R.E. [A.], 24 Clarence Road, Four Oaks, nr Birmingham.

ACCOMMODATION

ASSOCIATE resuming practice requires office accommodation in West London. Would be glad to share with another member. Office furniture available.—Apply Box 215, c/o The Secretary, R.I.B.A.

CHANGES OF ADDRESS

MR. S. K. JOGLEKAR [A.] is shortly sailing for India, where his address will be 298 Dr. Bhalchandra Road, Matunga, Bombay, 19, India. He will be pleased to receive trade catalogues, etc.

MR. S. STERN [F.] has removed to 35/37 Maddox Street, W.1 (Mayfair 5680), where he will be pleased to receive trade catalogues, etc.

MAJOR GLENN SARJEANT, M.B.E., R.E. [A.], is shortly returning from Assam. His address in England will be 6 Crescent Court, N.W.11, where he will be pleased to receive trade catalogues, etc.

MAJOR I. J. LEWIS [A.], Dip.Arch.(Dist.), has removed to 3 Cedar Drive, South Road, Durham City.

MR. F. W. FOSTER-TURNER [F.] has removed to 12 Vale Road, Kingkerswell, South Devon.

MAJOR G. C. BOXALL, M.C. [A.], is now practising at 173a Sherborne Road, Yeovil, Somerset.

MR. FRANCIS BARKER [A.] is now practising at Upton Cottage, Chagford, Devon (Chagford 3112), where he will be pleased to receive trade catalogues, etc.

MESSRS. CULPIN & SON [FF.] are now practising at 3 Southampton Place, W.C.1 (Holborn 0163).

LT.-COL. D. A. S. WEBSTER, R.E. [A.], has removed to 15 Ilchester Place, W.14.

PRACTICE FOR SALE

MEMBER [F. and F.S.I.], about to retire, wishes to dispose of his very old-established London practice (purely industrial).—Apply Box 201, c/o The Secretary, R.I.B.A.

WANTED AND FOR SALE

STUDENT R.I.B.A. is anxious to purchase, for examination studies, Oscar Faber's *Reinforced Concrete Simply Explained and Constructional Steelwork Simply Explained*; J. Leaning's *Quantity Surveying*; A. Munby's *The Chemistry and Physics of Building Materials*; A. H. M. Brice's *The Law Relating to the Architect*; H. R. Hitchcock & P. Johnson's *The International Style-Architecture since 1922*; Maurice Castel's *The New Style in Architecture and Design*; Prof. Walter Gropius' *The New Architecture and The Bauhaus*; and *Pioneers of the Modern Movement*.—Apply Box 209, c/o The Secretary, R.I.B.A.

WANTED. *The Architecture of Robert and James Adam*, by A. T. Bolton.—Apply Box 208, c/o The Secretary, R.I.B.A.

MEMBER [A.] has the following items for sale:—Two Imperial drawing boards (25s. each); one Imperial drawing board with ebony edge (without battens) (£2); one Imperial drawing board with ebony edge and battens (brand new and exceedingly well made) (£2 10s.); one D.E. drawing board without ebony edge or battens (£2 10s.); four D.E. mahogany, ebony edged T squares (£1 10s. each).—Apply Box 199, c/o The Secretary, R.I.B.A.

FOR SALE. Architect's plan cabinet, 7 ft. high, 4 ft. 6 ins. wide, 2 ft. 4 ins. deep. Six plan drawers cupboard over (£20).—Apply Box 198, c/o The Secretary, R.I.B.A.

FOR SALE. Bound volumes of the *Architectural Review* in brand new condition, 1897-1903 incl.; 1913 and 1914; 1919-1930 incl. Seen London, what offers?—Apply Box 207, c/o The Secretary, R.I.B.A.

FOR SALE. *Crystal Palace*. A book containing 27 plates of the working drawings of the building of the Great Exhibition by Charles Downes, Architect; also a book with plates of historical interest of the Palace (£12 12s.).—Apply Mr. F. White [F.], 19 Cumberland Mansions, George Street, Bryanston Square, W.1.

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